



Clearing Permit Decision Report

1. Application details and outcomes

1.1. Permit application details

Permit number:	11483/1
Permit type:	Purpose permit
Applicant name:	Northern Star Resources Ltd
Application received:	1 March 2026
Application area:	500 hectares
Purpose of clearing:	Mineral extraction and associated activities
Method of clearing:	Mechanical removal
Tenure:	General Purpose Lease 53/20 Mining Leases 53/191, 53/412, 53/413, 53/414, 53/461 and 53/552
Location (LGA area):	Shire of Wiluna
Colloquial name:	Jundee Sitewide Clearing Permit

1.2. Description of clearing activities

Northern Star Resources Ltd proposes to clear up to 500 hectares of native vegetation within a boundary of approximately 3,003 hectares, for the purpose of mineral extraction and associated activities (Northern Star, 2026a). The project is located approximately 40 kilometres north-east of Wiluna, within the Shire of Wiluna (GIS Database).

The application is to allow for amalgamation of the two existing permits (CPS 9128/3 and CPS 10001/1) which includes areas subject to previous mining disturbance and subsequent rehabilitation, and areas associated with proposed pit cutbacks (Cook and Menzies mining projects) (Northern Star, 2026b). The intent is to have one single permit covering Jundee operational areas, to allow for future mine expansion and streamlined compliance reporting over the remaining life of mine (Northern Star, 2026b).

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	2 July 2026
Decision area:	500 hectares of native vegetation

1.4. Reasons for decision

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

In making this decision, the Delegated Officer had regard for the site characteristics (Appendix A), relevant datasets (Appendix C), supporting information provided by the applicant, including the results of a flora and vegetation survey, the clearing principles set out in Schedule 5 of the EP Act (A.2), proposed avoidance and minimisation measures (Section 3.1), relevant planning instruments and any other matters considered relevant to the assessment (Section 0).

The assessment identified that the proposed clearing may result in:

- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values; and
- the potential land degradation in the form of wind erosion.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined the proposed clearing is unlikely to lead to long-term adverse impacts on environmental values.

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

- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds; and
- staged clearing to minimise land degradation.

1.5. Site map

A site map of proposed clearing is provided in Figure 1 below.

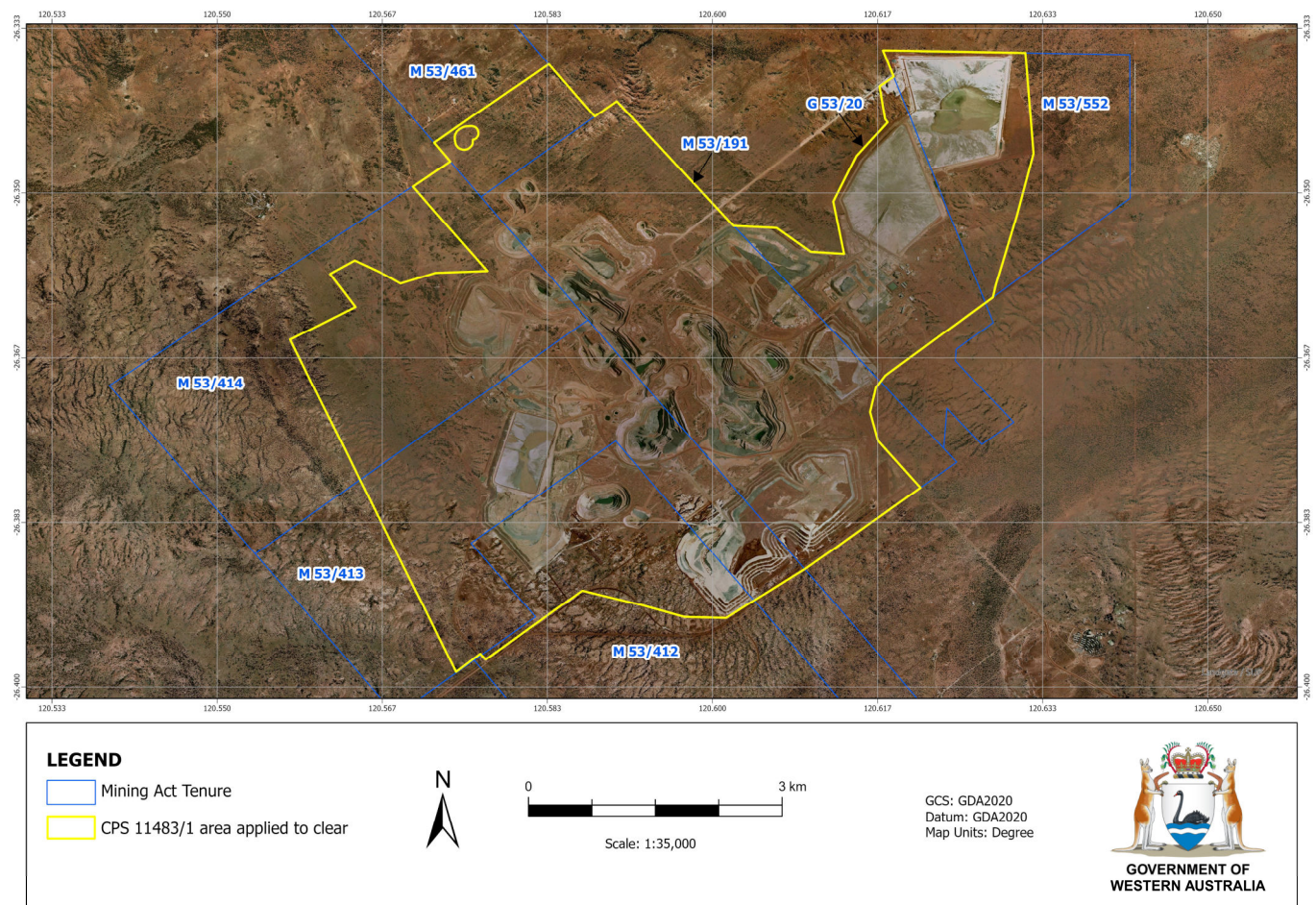


Figure 1. Map of the application area. The yellow outlined area indicates the area within which conditional authorised clearing can occur under the granted clearing permit.

2. Legislative context

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

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

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

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Conservation and Land Management Act 1984* (WA) (CALM Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *Mining Act 1978* (WA)
- *Rights in Water and Irrigation Act 1914* (RIWI Act)

The key guidance documents which inform this assessment are:

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

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

Evidence was submitted by the applicant, demonstrating that the following avoid and mitigation will be implemented (Northern Star, 2026a):

- design considerations to minimise clearing requirements;
- reutilising existing disturbed land where practicable (e.g. reutilising existing drill pads and access tracks for new exploration activities and placing new mining infrastructure over existing mining infrastructure);
- clearing is conducted as close as possible to construction activities to prevent over clearing areas not required for infrastructure and enabling optimisation in designs to occur and aids in preventing erosion and sedimentation by maintaining soil stability for as long as possible prior to clearing;
- potential development of a diversion channel to redirect intercepted surface water drainage to existing flow paths, ensuring that surface water flows are maintained to downstream receptors and preventing erosion within cleared areas;
- cleared areas will be rehabilitated in accordance with mine closure obligations pursuant to the *Mining Act 1978*;
- provision of watercarts for wetting down soils during clearing activities as required;
- requiring mobile plant to be thoroughly cleaned prior to entering Jundee; and
- clearing will be implemented in accordance with Northern Star's Environmental Management System (EMS). The EMS outlines plans, procedures and other strategies for managing environmental impacts from Northern Star's activities, as guided by Northern Star's Environmental Policy (NSR-COR-003-POL). Training is regularly conducted by Northern Star's environmental department to ensure workers are aware of the requirements of the EMS and adhere to expectations of management.

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

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix A) and the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values.

The assessment against the clearing principles identified that the impacts of the proposed clearing present a risk to biological values (fauna and flora). The consideration of these impacts, and the extent to which they can be managed through conditions applied in line with sections 51H and 51I of the EP Act, is set out below.

Biological values (flora & fauna) - Clearing Principle (a)

Assessment

This purpose permit proposes to clear up to 500 hectares of native vegetation within a broader 3,003 hectares purpose permit footprint, which defines the boundary of the application. Of this, approximately 1,376 hectares are covered by existing permits, and approximately 1,978 hectares have been previously cleared and disturbed by mining and pastoral activities (Northern Star 2026b; GIS Database).

The application area is located within the Eastern Murchison subregion of the Murchison Interim Biogeographic Regionalisation for Australia (IBRA) bioregion (GIS Database). The Eastern Murchison subregion is characterised by internal drainage and extensive areas of elevated red desert sandplains with minimal dune development (CALM, 2002). Vegetation of the subregion is dominated by Mulga woodlands (often rich in ephemerals), hummock grasslands, saltbush shrublands and Tecticornia shrublands (CALM, 2002). Pastoral grazing occurs over a vast majority of the subregion, and consequently, much of the subregion has been severely degraded by feral herbivores. Mining for gold and nickel in the region is considerable, with most mining tenements occurring on pastoral land (CALM, 2002).

Three flora and vegetation surveys have been conducted over different areas within the application area by Botanica Consulting during March and April, 2020 and October 2022. Four vegetation types were identified within application area, with the major vegetation groups being made up of Acacia forests and woodlands (Botanica Consulting, 2020a; 2020b; 2023). These vegetation communities are common and widespread in the region (Botanica Consulting, 2020a; 2020b; 2023).

No Threatened or Priority flora, or Threatened or Priority Ecological Communities have been identified within the application area (Botanica Consulting, 2020a; 2020b). Two priority flora species could potentially occur within the application area as suitable habitat is present and records have been identified within 30 kilometres (GIS Database). As the surveys were undertaken during the correct season for identification, it is unlikely these species occur within the application area (Botanica Consulting, 2020a; 2020b; 2023). The proposed clearing is not likely to significantly impact the Priority flora that may potentially occur within the application area (A.2), as suitable habitat is available within the surrounding areas and additional records have been identified in the adjacent areas and bioregion (GIS Database).

Three introduced flora species were recorded within the survey area (Botanica Consulting, 2020a; 2020b; 2023). Weeds have the potential to alter the biodiversity of an area, competing with native vegetation for available resources and making areas more fire prone. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

During the fauna survey, no species of conservation significance were observed (Botanica Consulting, 2020a; 2020b; 2023). Two species of conservation significance have been identified as potentially utilising the application area (*Falco hypoleucos* and *Falco peregrinus*); however, these species would be considered visitors as no suitable breeding habitat was identified within the application area (Botanica Consulting, 2020a; 2020b; 2023; Commonwealth of Australia, 2008).

Fourteen migratory shorebirds have been recorded within 40 kilometres of the application area (GIS Database). These species prefer muddy edges of shallow fresh or brackish wetlands (Botanica Consulting, 2020a; 2020b; Commonwealth of Australia, 2008). As no suitable habitat exists within the application area, these migratory birds are not likely to occur and therefore the proposed clearing will not impact these species.

Conclusion

The vegetation associations, fauna habitats and landform types present within the application area, are well represented in surrounding areas (Botanica Consulting, 2020a; 202b; GIS Database). Much of the surrounding area has been impacted by previous pastoral and current mining activities (Botanica Consulting, 2020a; 202b; GIS Database). The application area is unlikely to represent an area of higher biodiversity than surrounding areas, in either a local or regional context.

Conditions

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

- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds;
- undertake slow, progressive one-directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity; and
- staged clearing to minimise land degradation.

3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on 9 June 2026 by the Department of Mines, Petroleum and Exploration inviting submissions from the public. No submissions were received in relation to this application.

There is one native title claim over the area under application (DPLH, 2026). This claim has been determined by the Federal Court on behalf of the claimant group. The mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993*, and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are several registered Aboriginal Sites of Significance within the application area (DPLH, 2026). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

Other relevant authorisations required for the proposed land use include:

- A Mining Development and Closure Proposal approved under the *Mining Act 1978*

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

End

Appendix A. Site characteristics

A.1. Site characteristics

Characteristic	Details
Local context	The area proposed to be cleared is located approximately 40 kilometres north-east of Wiluna, within the Shire of Wiluna (GIS Database). The area proposed to be cleared is part of an expansive tract of native vegetation in the extensive land use zone of Western Australia (GIS Database). The dominant land use within the area includes grazing native pastures, unallocated crown reserves, conservation and mining (Botanica Consulting, 2020a; 2020b).
Ecological linkage	According to available databases, the application area does not contain any known or mapped ecological linkages (GIS Database).
Conservation areas	The application area is not located within a conservation area (GIS Database). The nearest conservation area (Matuwa Kurrara Kurrara National Park) is located approximately 40 kilometres from the application area (GIS Database).
Vegetation description	The vegetation of the application area is broadly mapped as the following Beard vegetation association: 18: Low woodland; mulga (<i>Acacia aneura</i>) (GIS Database). Three flora and vegetation surveys have been conducted over the adjacent areas by Botanica Consulting during March and April, 2020 and October 2022. The following four vegetation types were recorded within the survey area and can be assumed to occur within the application area based on aerial imagery (Botanica Consulting, 2020a; 2020b; 2023; GIS Database): • CLP-AFW1: Acacia Forests and Woodland (MVG 6). Low woodland of <i>Acacia incurvaneura</i> over low shrubland of <i>Eremophila forrestii</i> <i>E. margarethae</i> and low tussock grassland of <i>Eragrostis eriopoda</i> on clay-loam plain; • SLP-AFW1: Acacia Forests and Woodland (MVG 6). Low woodland of <i>Acacia caesaneural</i> <i>A. incurvaneura</i> over mid open shrubland of <i>Eremophila forrestii</i> and low hummock grassland of <i>Triodia basedowii</i> on sand-loam plain; • QRP-AOW1: Acacia Open Woodland (MVG 13). Low open woodland of <i>Acacia incurvaneural</i> <i>Hakea lorea</i> over mid open shrubland of <i>Eremophila fraseri</i> and low shrubland of <i>Eremophila margarethae</i> on quartz-rocky plain; and • QRP-AFW1: Acacia Forests and Woodland (MVG 6). Low woodland of <i>Acacia incurvaneura</i> over mid open shrubland of <i>Psyrdrax suaveolens</i> and low open tussock grassland of <i>Eragrostis eriopoda</i> on quartz-rocky plain.
Vegetation condition	The vegetation survey (Botanica Consulting, 2020a; 2020b; 2023) and aerial imagery indicate the vegetation within the proposed clearing area is in 'Completely Degraded' to 'Very Good' (Trudgen, 1991) condition. The full Trudgen (1991) condition rating scale is provided in Appendix B.
Climate and landform	The climate of the region (Murchison) is arid and experiences an average annual rain fall of 240.2 millilitres (BoM, 2026).
Soil description	The soils of the application area are broadly mapped as the following soil types: • 279Wi: Wiluna system. Low greenstone hills with occasional lateritic breakaways and broad stony slopes, lower saline stony plains and broad drainage tracts; supporting sparse mulga and other acacia shrublands with patches of halophytic shrubs; • 279Vi: Violet system. Gently undulating gravelly plains on greenstone, laterite and hardpan, with low stony rises and minor saline plains; supporting groved mulga and bowgada shrublands and occasionally chenopod shrublands; and • 279Ju: Jundee system. Hardpan plains with variable gravelly mantles and minor sandy banks supporting weakly groved mulga shrublands (DPIRD, 2026).
Land degradation risk	The application area lies within the Jundee, Violet and Wiluna land systems (GIS Database). These three land systems are not generally susceptible to erosion (Curry et al., 1994).
Waterbodies	The desktop assessment and aerial imagery indicates that there are no watercourses within the application area (GIS Database). There are no Ramsar wetlands or wetlands of national importance (ANCA Wetlands), permanent or ephemeral drainage lines occur within the application area (GIS Database).
Hydrogeography	The application area is not mapped within a proclaimed groundwater area (GIS Database). The proposed area is located within the Murchison Groundwater Area (GIS Database).
Flora	Three flora and vegetation surveys have been conducted over the application area by Botanica Consulting during March and April 2020 and October 2022. No Threatened or Priority flora have been identified within the survey areas (Botanica Consulting, 2020a; 2020b).

Characteristic	Details
Ecological communities	The application area is not located within a Threatened Ecological Community (GIS Database). The north-eastern areas of the proposed clearing are located within the buffer zone of the Priority 1 Ecological Community, Jundee Homestead calcrete groundwater assemblage type on Carnegie palaeo drainage on Jundee Station (GIS Database). This community is a unique assemblages of invertebrates that have been identified in the groundwater calcretes (GIS Database).
Fauna	There is no conservation significant fauna within the application area (GIS Database). According to available datasets, there are 22 conservation significant fauna species within 50 kilometres of the application area (GIS Database).
Fauna habitat	The flora, vegetation and fauna survey that was undertaken across the adjacent areas by Botanica Consulting during March and April 2020 and October 2022 identified three broad scale fauna habitats: • Clay-Loam Plain; • Quartz-Rocky Plain; and • Sand-Loam Plain (Botanica Consulting, 2020a; 2020b; 2023).

A.1. Vegetation extent

	Pre-European area (ha)	Current extent (ha)	Extent Remaining %	Current extent in all DBCA managed land (ha)	Current proportion (%) of pre-European extent in all DBCA Managed Lands
IBRA Bioregion -Murchison	28,120,586.77	28,044,823.42	99.73	2,185,987.96	7.77
Beard vegetation associations - State					
Veg Assoc No. 18	19,892,306.46	19,843,148.07	99.75	1,317,179.00	6.62
Beard vegetation associations - Bioregion					
Veg Assoc No. 18	12,403,172.30	12,363,252.47	99.68	614,964.13	4.96

Government of Western Australia (2019)

A.2. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix C.1), and biological survey information, impacts to the following conservation significant flora required further consideration (Botanica Consulting, 2020a; 2020b; 2023; WAH, 1998-; GIS Database).

Species name	Conservation status	Distance of closest record to application area (km)	Suitable habitat features? [Y/N]	Number of known records (total)
<i>Aristida jerichoensis</i> var. <i>subspinulifera</i>	P3	<5	Y	49
<i>Eremophila arguta</i>	P1	<30	N	7
<i>Eremophila congesta</i>	P1	<30	N	18
<i>Eremophila jamesiorum</i>	P2	<25	N	15
<i>Eremophila pungens</i>	P4	<35	N	46
<i>Hemigenia exilis</i>	P4	<35	N	45
<i>Ptilotus luteolus</i>	P3	<30	Y	20
<i>Stackhousia clementii</i>	P3	<25	N	23
<i>Tribulus adelacanthus</i>	P3	<1	N	19
<i>Xanthoparmelia nashii</i>	P3	<35	N	18

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

A.3. Fauna analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix C.1), and biological survey information, impacts to the following conservation significant fauna required further consideration (Botanica Consulting, 2020a; 2020b; 2023; WAH, 1998-; GIS Database).

Species name	Common Name	Conservation status	Distance of closest record to application area (km)	Suitable habitat features? [Y/N]
<i>Actitis hypoleucos</i>	common sandpiper	MI	<15	Y
<i>Amytornis textilis textilis</i>	western grasswren	P4	<45	N
<i>Antechinomys longicaudata</i>	long-tailed dunnart	P4	<35	N
<i>Apus pacificus</i>	fork-tailed swift	MI	<15	N
<i>Calidris acuminata</i>	sharp-tailed sandpiper	MI	<15	N
<i>Calidris alba</i>	sanderling	MI	<15	N
<i>Calidris melanotos</i>	pectoral sandpiper	MI	<15	N
<i>Calidris ruficollis</i>	red-necked stint	MI	<15	N
<i>Calidris subminuta</i>	long-toed stint	MI	<15	N
<i>Charadrius veredus</i>	oriental plover	MI	<15	N
<i>Dasycercus blythi</i> *	brush-tailed mulgara	P4	<50	N
<i>Falco hypoleucos</i>	grey falcon	VU	<5	Y
<i>Falco peregrinus</i>	peregrine falcon	OS	<35	Y
<i>Gelochelidon nilotica</i>	gull-billed tern	MI	<15	N
<i>Glareola maldivarum</i>	oriental pratincole	MI	<15	N
<i>Macrotis lagotis</i>	bilby, dalgyte, ninu	VU	<35	N
<i>Pezoporus occidentalis</i>	night parrot	CR	<30	N
<i>Plegadis falcinellus</i>	glossy ibis	MI	<15	N
<i>Pluvialis fulva</i>	Pacific golden plover	MI	<15	N
<i>Tringa glareola</i>	wood sandpiper	MI	<15	N
<i>Tringa nebularia</i>	common greenshank	MI	<15	N

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

*record from 1990s have been removed

A.2. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
<u>Principle (a):</u> "Native vegetation should not be cleared if it comprises a high level of biodiversity." <u>Assessment:</u> The vegetation associations, fauna habitats and landform types present within the application area, are well represented in surrounding areas (Botanica, 2020a; 2020b; 2023 GIS Database). Much of the surrounding area has been impacted by previous pastoral and current mining activities (Botanica, 2020a; 2020b; 2023; GIS Database). The application area is unlikely to represent an area of higher biodiversity than surrounding areas, in either a local or regional context.	Not likely to be at variance	Yes Refer to Section 3.2.1, above.
<u>Principle (b):</u> "Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna." <u>Assessment:</u> No significant fauna habitats have been recorded within the application area (GIS Database). Two fauna species of conservation significance may potentially utilise the habitat within the application area, however, the application area is not likely to represent significant habitat for the species (GIS Database).	Not likely to be at variance	Yes Refer to Section 3.2.2, above.

Assessment against the clearing principles	Variance level	Is further consideration required?
<u>Principle (c):</u> <i>"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."</i> <u>Assessment:</u> No threatened or priority flora have been identified within the adjacent survey areas and no threatened flora species have been recorded within 40 kilometres of the application area (Botanica Consulting, 2020a; 2020b; 2023; GIS Database). The area proposed to be cleared may contain priority flora species (GIS Database).	Not likely to be at variance	No
<u>Principle (d):</u> <i>"Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community."</i> <u>Assessment:</u> There are no known Threatened Ecological Communities (TECs) located within the application area (GIS Database).	Not likely to be at variance	No
Environmental value: significant remnant vegetation and conservation areas		
<u>Principle (e):</u> <i>"Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."</i> <u>Assessment:</u> The application area falls within the Murchison Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 99% of the pre-European vegetation still exists in the IBRA Murchison Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation association 18: Low woodland; mulga (<i>Acacia aneura</i>) (GIS Database). Approximately 99% of the pre-European extent of this vegetation association remains uncleared at both the state and bioregional level (Government of Western Australia, 2019). Therefore, the application area does not represent a significant remnant of native vegetation in an area that has been extensively cleared.	Not at variance	No
<u>Principle (h):</u> <i>"Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area."</i> <u>Assessment:</u> Given the distance to the nearest conservation area, the proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas (GIS Database).	Not likely to be at variance	No
Environmental value: land and water resources		
<u>Principle (f):</u> <i>"Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."</i> <u>Assessment:</u> Given no water courses or wetlands are recorded within the application area, the proposed clearing is unlikely to impact on- or off-site hydrology and water quality.	Not at variance	No
<u>Principle (g):</u> <i>"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."</i> <u>Assessment:</u> The mapped soils and land systems within the application area are not generally susceptible to erosion, however native vegetation clearing should be staged where possible to minimise the area of land exposed to land degradation at any one time and may be minimised by the implementation of a staged clearing condition.	May be at variance	No
<u>Principle (i):</u> <i>"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water."</i> <u>Assessment:</u> Given no watercourses, permanent waterbodies, wetlands, or Public Drinking Water Sources Areas have been recorded within the application area, the proposed clearing is unlikely to impact surface or ground water quality.	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
<u>Principle (j):</u> "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding." <u>Assessment:</u> There are no permanent water courses or waterbodies within the application area (GIS Database). Seasonal drainage lines are common in the region and temporary localised flooding may occur briefly following heavy rainfall events. However, the proposed clearing is unlikely to increase the incidence or intensity of natural flooding events.	Not likely to be at variance	No

Appendix B. Vegetation condition rating scale

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

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

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

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

Appendix C. Sources of information

C.1. GIS datasets

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

- 10 metre contours (DPIRD-073)
- Cadastre (Polygon) (LGATE-217)
- Clearing Instruments Activities (Areas Approved to Clear) (DWER-076)
- Clearing Instruments Conditions (Areas Subject to Conditions) (DWER-077)
- Clearing Instruments Proposals (Areas Applied to Clear) (DWER-075)
- Clearing Regulations - Environmentally Sensitive Areas (DWER-046)
- Clearing Regulations - Schedule One Areas (DWER-057)
- DBCA - Lands of Interest (DBCA-012)
- DBCA - Legislated Lands and Waters (DBCA-011)
- DBCA Fire History (DBCA-060)
- Groundwater Salinity Statewide (DWER-026)
- IBRA Vegetation Statistics
- IBSA Survey Details (DWER-118)
- Local Government Area (LGA) Boundaries (LGATE-233)

- Localities (LGATE-234)
- Mineral Field Boundaries (DMIRS-005)
- Native Title (Determination) (LGATE-066)
- Native Vegetation Extent (DPIRD-005)
- Pre-European Vegetation (DPIRD-006)
- Public Drinking Water Source Areas (DWER-033)
- Regional Parks (DBCA-026)
- Reserves (LGATE-227)
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Mapping - Best Available (DPIRD-027)
- Soil Landscape Mapping - Project Areas (DPIRD-070)
- Surface Water Management Areas (DWER-041)
- Townsites (LGATE-248)
- WA Now Aerial Imagery
- WRIMS - Groundwater Areas (DWER-085)

Restricted GIS Databases used:

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

C.2. References

- Botanica Consulting (2020a) Reconnaissance Flora/ Vegetation & Fauna Survey Jundee TSF alternative locations. Unpublished report prepared for Northern Star Resources Limited, April 2020.
- Botanica Consulting (2020b) Reconnaissance Flora/ Vegetation & Fauna Survey within M53/191. Unpublished report prepared for Northern Star Resources Limited, June 2020.
- Botanica Consulting (2023) Jundee Project-Cook Pit Flora and Fauna Assessment. Unpublished report prepared for Northern Star Resources Limited, April 2023.
- Bureau of Meteorology (BoM) (2026) Bureau of Meteorology Website – Climate Data Online, Weather Station (Number 012090). Bureau of Meteorology. <https://reg.bom.gov.au/climate/data/> (Accessed 24 June 2026).
- Conservation and Land Management (CALM) (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- Commonwealth of Australia (2008) Species Profile and Threats Database. Department of Climate Change, Energy, the Environment and Water, Australia. <https://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl> (Accessed 24 June 2026).
- Curry, P.J., Payne, A.L., Leighton, K.A., Hennig, P. & Blood, D.A (1994) Technical Bulletin No. 84: An inventory and condition survey of the Murchison River catchment and surrounds, Western Australia. Department of Agriculture Western Australia, South Perth, Western Australia
- Department of Environment Regulation (DER) (2014) A guide to the assessment of applications to clear native vegetation. Perth. https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf
- Department of Planning, Lands and Heritage (DPLH) (2026) Aboriginal Cultural Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://espatial.dplh.wa.gov.au/ACHIS/index.html?viewer=ACHIS> (Accessed 24 June 2026).
- Department of Primary Industries and Regional Development (DPIRD) (2026) NRInfo Digital Mapping. Department of Primary Industries and Regional Development. Government of Western Australia. <https://dpiird.maps.arcgis.com/apps/webappviewer/index.html?id=662e8cbf2def492381fc915aaf3c6a0f> (Accessed 24 June 2026).
- Department of Water and Environmental Regulation (DWER) (2021) Procedure: Native vegetation clearing permits. Joondalup. <https://www.wa.gov.au/system/files/2024-11/procedure-native-vegetation-clearing-permits.pdf>
- Environmental Protection Authority (EPA) (2016a) Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment. http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey_Dec13.pdf

- Environmental Protection Authority (EPA) (2016b) Technical Guidance – Terrestrial Fauna Surveys. https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/Tech%20guidance-%20Terrestrial%20Fauna%20Surveys-Dec-2016.pdf
- Environmental Protection Authority (EPA) (2020) Technical Guidance – Terrestrial Fauna Surveys. https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/2020.09.17%20-%20EPA%20Technical%20Guidance%20-%20Vertebrate%20Fauna%20Surveys%20-%20Final.pdf
- Environmental Protection Authority (EPA) (2026) Guideline for Cumulative Impact Assessment. January 2026. https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/Cumulative%20Impact%20Assessment_final.pdf.pdf
- Government of Western Australia (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions. <https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>
- Northern Star Resources Ltd (Northern Star) (2026a) Clearing permit application form, CPS 11483/1, received 1 March 2026.
- Northern Star Resources Ltd (Northern Star) (2026b) Jundee Sitewide Clearing Permit - Purpose Permit Application Supporting Document. Prepared for by Northern Star Resources Limited, February 2026.
- Trudgen, M.E. (1991) Vegetation condition scale in National Trust (WA) 1993 Urban Bushland Policy. National Trust of Australia (WA), Wildflower Society of WA (Inc.), and the Tree Society (Inc.), Perth.
- Western Australian Herbarium (WAH) (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions, Western Australia. <https://florabase.dbca.wa.gov.au/> (Accessed 24 June 2026).

Glossary

Acronyms:

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

Definitions:

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

Threatened species

T Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the Biodiversity Conservation Act 2016 (BC Act).

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

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

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

CR Critically endangered species

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

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

EN Endangered species

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

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

VU Vulnerable species

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

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

Extinct species

Listed by order of the Minister as extinct under section 23(1) of the BC Act as extinct or extinct in the wild.

EX Extinct species

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

EW Extinct in the wild species

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

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

Specially protected species

SP Specially protected species

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

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

MI Migratory species

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

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

migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

CD Species of special conservation interest (conservation dependent fauna)

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

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

OS Other specially protected species

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

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

Priority species

P Priority species

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- (a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands.
- (b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as a conservation dependent specially protected species.
- (c) Species that have been removed from the list of threatened species or lists of conservation dependent or other specially protected species, during the past five years for reasons other than taxonomy.

- (d) Other species in need of monitoring.

Principles for clearing native vegetation:

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