



Clearing Permit Decision Report

1. Application details and outcomes

1.1. Permit application details

Permit number:	11476/1
Permit type:	Purpose permit
Applicant name:	Carnegie Gold Pty Ltd
Application received:	25 February 2026
Application area:	4 hectares
Purpose of clearing:	Construction of an access track, pipeline and bore
Method of clearing:	Mechanical removal
Tenure:	Miscellaneous Licence 30/86
Location (LGA area):	Shire of Menzies
Colloquial name:	Papertalk Borefield Extension

1.2. Description of clearing activities

Carnegie Gold Pty Ltd proposes to clear up to 4 hectares of native vegetation within a boundary of approximately 4 hectares, for the purpose of construction of an access track, pipeline and bore. The project is located approximately 7 kilometres northeast of Davyhurst, within the Shire of Menzies.

The application is to allow for the construction of an access track, pipeline and bore.

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	16 July 2026
Decision area:	4 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 E), 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 (Appendix B), proposed avoidance and minimisation measures (Section 3.1), relevant planning instruments and any other matters considered relevant to the assessment (Section 3.3). The Delegated Officer also took into consideration the purpose of the clearing to facilitate the replacement of drainage culverts along a haul road.

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;
- potential impacts on vegetation associated with a watercourse and disruption of surface water flows;
- potential impacts to conservation significant fauna which may transect the proposed area to be cleared;
- the loss of native vegetation that is suitable habitat for malleefowl (*Leipoa ocellata*); and
- 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 (Section 1.1), the Delegated Officer determined the proposed clearing can be minimised and managed to be unlikely to lead to an unacceptable risk to environmental values.

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

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

- undertake slow, progressive one-directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity; and
- commence construction no later than six months after undertaking clearing to reduce the risk of erosion.

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 1.1), 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)

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)
- Guidance for the Assessment of Environmental Factors – Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia (EPA, 2004)

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

The applicant carried out targeted fauna surveys before submitting the application to the department in an effort to avoid and mitigate any potential impact to habitats associated with conservation significant fauna species. Furthermore, the proponent has adopted mitigation measures during clearing, including pre-disturbance surveys and environmental risk assessments; timely completion of studies to informed planning; and the utilisation of existing cleared areas; and the adoption of progressive clearing practices (OBM, 2025). 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 (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 malleefowl transecting the proposed area to be cleared. The consideration of these impacts, and the extent to which they can be managed through conditions applied in line with sections 51H and 51I of the EP Act, is set out below.

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

Assessment

A vegetation and flora survey for the potential presence of arid bronze azure butterfly (ABAB) and Inland Hairstreak Butterfly was conducted over the application area by Jenny Borger Botanical Consulting (JB Botanical Consulting) (2025) in January 2025. The survey also encompassed an assessment of impacts to riparian vegetation. No Threatened or priority flora species were identified within the application area (JB Botanical Consulting, 2025). Seven vegetation types were identified (see Appendix A.1). A desktop assessment was also undertaken to identify any species that could potentially occur within the application area.

Hysterobaeckea ochropetala subsp. *cometes*, Priority 3, is an erect compact shrub that occurs over low Eucalypt woodlands on red sandy loam and occasional Mallee or Allocasuarina (WA Herbarium, 1998-). There are 29 Western Australian Herbarium (1998-) records distributed across the Coolgardie and Murchison IBRA regions. There is suitable habitat for the conservation significant flora species within the proposed area of clearing in the form of Eucalypt woodlands and red sandy loam. While there is suitable habitat within the application area, the species is not geographically restricted and is known within the local surrounds, so the proposed clearing is not considered likely to have a significant impact on the conservation of this species (WA Herbarium, 1998-).

Homalocalyx grandiflorus, Priority 3, is a small shrub that occurs in Mallee and/or Acacia shrubland over yellow/red sandy soil (WA Herbarium, 1998-). There are 16 Western Australian Herbarium (1998-) records distributed across the Coolgardie and Murchison IBRA regions. While there is suitable habitat within the application area, the species is not geographically restricted

and is known within the local surrounds, so the proposed clearing is not considered likely to have a significant impact on the conservation of this species (WA Herbarium, 1998-).

Conclusion

There is no conservation significant flora likely to be significantly impacted by the proposed clearing, however suitable habitat may occur for some priority flora species. Given the small, linear nature of the proposed clearing, it is unlikely to significantly impact any unknown populations.

Conditions

The proposed clearing can be mitigated using the below conditions, to be environmentally acceptable:

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

3.2.2. Biological values (fauna) - Clearing principle (b)

Assessment

A targeted fauna survey for arid bronze azure butterfly, inland hairstreak butterfly and malleefowl was undertaken across Miscellaneous Licence 30/86 by Woolard Consulting, and Leanne James Environment, in April 2024 and January 2025. The proposed area to be cleared was identified as featuring suitable habitat for the four conservation significant species discussed below.

Malleefowl

Malleefowl (*Leipoa ocellata*, VU) occur in a wide range of habitats generally consisting of a sandy substrate with trees between 3 and 8 metres in height and a shrub layer providing horizontal cover (DCCEEW, 2024). This species particularly prefers shrublands with low woodlands dominated by mallee and also occurs in some shrublands in Western Australia dominated by Acacia and eucalypts (Frith, 1962a; 1962b; DCCEEW, 2024). There is suitable habitat for malleefowl within vegetation unit VT2 (see Appendix A.1) (Woolard, 2025). There are no known active malleefowl mounds within the application area (Woolard, 2025). Due to the nature of the application area being a narrow corridor to accommodate an access track, pipeline and bore, the proposed clearing is not likely to impact breeding efforts for the Malleefowl.

Peregrine falcon

Peregrine falcon (*Falco peregrinus*, OS) are widely dispersed small raptors which are commonly associated with banded ironstone formations, breakaways and granite outcrops (Fox et al., 2016). The biological surveys did not specifically assess the suitability of present habitat for peregrine falcon; however, this species may utilise vegetation in association with the drainage line in the western portion of the application area. As there is no suitable breeding habitat within the application area, the proposed clearing is unlikely to have a significant impact on the conservation significance of this species.

Arid bronze azure butterfly and inland hairstreak butterfly

Arid bronze azure butterfly (ABAB) (*Ogyris petrina*, CR) has a severely fragmented and restricted geographic distribution across two remaining subpopulations in Western Australia. The species is known to have a complex dependency on the co-occurring sugar ant (*Camponotus* sp. nr. *terebrans*) to complete their lifecycle, with ABAB larvae living entirely in the sugar ants' nests during their development (WABSI, 2022). The preferred habitat for ABAB is described as vegetation of mature mixed gimlet (*Eucalyptus salubris*) and salmon gum (*Eucalyptus salmonophloia*) woodlands on red-brown loam soils, with an open understorey (DBCA, 2020). The application area has suitable habitat for ABAB within vegetation units VT1 and VT7 (see Appendix A.1) (Woolard, 2025). The targeted fauna survey did not identify any sugar ant colonies within the survey area. The proposed clearing is unlikely to have a significant impact on the conservation significance of this species.

Inland hairstreak butterfly (*Jalmenus aridus*, Priority 4) is known from two locations near Kalgoorlie; however, it has been recorded from another 10 locations within an area extending approximately 121 kilometres north to south by 42 kilometres east to west (Eastwood et al., 2023). The preferred habitat for this species is open woodland with mature *Senna artemisioides* ssp. *filifolia* and mixed flowering shrubs (*Eremophila*, *Scaevola*, and *Maireana*) with open areas of well drained exposed ground adjoining the host plants (Eastwood et al., 2023). Inland hairstreak butterfly caterpillars feed on the flowers of *Senna artemisioides* ssp. *filifolia*. It also has a symbiotic relationship with the ant species *Froggattella kirbii* (Eastwood et al., 2023). There is suitable habitat for inland hairstreak butterfly within vegetation unit VT7 (see Appendix A.1). The targeted fauna survey did not identify any presence of *Froggattella kirbii* within the application area. The proposed clearing is unlikely to have a significant impact on the conservation significance of this species.

Conclusion

For the reasons set out above, the proposed clearing is unlikely to have a significant impact on conservation significant fauna species,

The applicant may have notification responsibilities under the EPBC Act for impacts to malleefowl and their habitats, as set out in the EPBC Act. The applicant has been advised to contact the federal Department of Climate Change, Energy, the Environment and Water (DCCEEW) to discuss EPBC Act referral requirements.

Conditions

No fauna management conditions are needed,

3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on 24 April 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 (WC2017/007 - Marlinyu Ghoorlie) over the area under application (DPLH, 2026). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. The mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993*, and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are no registered Aboriginal Sites of Significance within the application area (DPLH, 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.

It is noted that the proposed clearing may impact on malleefowl, which is a protected matter under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act). The proponent may be required to refer the project to the (Commonwealth) Department of Climate Change, Energy, the Environment and Water for environmental impact assessment under the EPBC Act. The proponent is advised to contact the Department of Climate Change, Energy, the Environment and Water for further information regarding notification and referral responsibilities under the EPBC Act.

Other relevant authorisations required for the proposed land use include:

- A Programme of Work 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 part of an expansive tract of native vegetation in the intensive land use zone of Western Australia (GIS Database). It is surrounded by vegetation of the Eastern Murchison Interim Biogeographic Regionalisation for Australia subregion. The proposed clearing area is part of the extension of the Papertalk Borefield to include additional bores within Miscellaneous Licence 30/86 to supplement the existing water supply used for Davyhurst Operations (Carnegie Gold Pty Ltd, 2026).
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 intercepts the Credo Conservation Area (NRS) (GIS Database).
Vegetation description	The vegetation of the application area is broadly mapped as the following Beard vegetation associations: 20: Low woodland; mulga mixed with <i>Allocasuarina cristata</i> & <i>Eucalyptus</i> sp.; and 1413: Shrublands; acacia, casuarina & melaleuca thicket (GIS Database). A flora and vegetation survey was conducted over the application area by Jenny Borger Botanical Consulting (2025) during January 2025. The following vegetation units were recorded within the application area (JB Botanical Consulting, 2025): VT1: <i>Eucalyptus salmonophloia</i> woodland/ <i>Senna artemisioides</i> subsp. <i>filifolia</i>, <i>Scaevola spinescens</i>, <i>Santalum acuminatum</i> open shrubland with patches of <i>Eucalyptus lesouefii</i> woodland on plains; VT2: <i>Acacia caesaneura</i>, <i>A. aneura</i>, <i>A. ramulosa</i> tall sparse shrubland over <i>Acacia ramulosa</i>, <i>Grevillea oligomera</i> shrubland over <i>Prostanthera grylloana</i> low sparse shrubland on low gravelly rises; VT3: <i>Acacia aneura</i> tall shrubland patches and <i>Eucalyptus oleosa</i> subsp. <i>oleosa</i> open woodland over <i>Iseilema membranaceum</i>, <i>Goodenia</i> sp. low open tussock grassland on alluvial plains with crabholes; VT4: <i>Casuarina pauper</i> open woodland over <i>Ptilotus obovatus</i>, <i>Mairena</i> spp., <i>Atriplex vesicaria</i> low open shrubland on ironstone plains; VT5: <i>Casuarina pauper</i>, <i>Pittosporum angustifolium</i> low open woodland over <i>Eremophila alternifolia</i>, <i>E. glabra</i> subsp. <i>glabra</i>, <i>Pimelea microcephala</i>, <i>Acacia burkittii</i>, <i>Atriplex nummularia</i> open shrubland; alluvial plain with incised drainage tracts; VT6: <i>Eucalyptus concinna</i> mallee woodland over <i>Acacia hemiteles</i>, <i>A. burkittii</i> isolated shrubs; alluvial plain with crabholes; and VT7: <i>Eucalyptus salmonophloia</i> woodland over <i>Eremophila scoparia</i> open shrubland over <i>Atriplex nummularia</i>, <i>Cratystylis subspinescens</i>, <i>Eremophila scoparia</i>, <i>Acacia hemiteles</i> low sparse shrubland on plains. Representative photos are available in Appendix D.
Vegetation condition	Vegetation surveys of the application area found the vegetation to be in Poor, Good, and Very Good condition (Trudgen, 1991). The full Trudgen (1991) condition rating scale is provided in Appendix C.
Climate and landform	The climate of the Eastern Murchison subregion is described as arid, with the nearest weather station recording an average rainfall of approximately 252.7 millimetres per year (BoM, 2026; CALM, 2002).
Soil description	The soil is mapped in the majority as hard cracking clay and red deep sandy duplex (OBM, 2025; DPIRD, 2026).
Land degradation risk	The application area is mapped within the Bunyip Land System which is described as featuring alluvial tracts, commonly with gilgai, draining greenstone hills, supporting mixed halophytic shrublands occasionally with a black oak or eucalypt overstorey (Waddell & Galloway, 2023; DPIRD, 2025). Alluvial plains are susceptible to erosion, particularly if perennial shrub cover is substantially reduced (Waddell & Galloway, 2023).
Waterbodies	The desktop assessment and aerial imagery indicated no watercourses transect the area proposed to be cleared. There is one non-perennial, minor watercourse (Papertalk Brook) is located within 100 metres of the area proposed to be cleared (GIS Database).
Hydrogeography	The nearest Public Drinking Water Source Area is located approximately 41 kilometres northeast of the application area (GIS Database).

Characteristic	Details
	The application area is located within the Goldfields Ground Water Area proclaimed under the <i>Rights in Water and Irrigation Act 1914</i> (GIS Database). There are no Wetlands of International Importance or Nationally Important Wetlands that occur within the application area or in the surrounds (20 kilometres) (GIS Database). The closest Nationally Important Wetland is Rowles Lagoon System located approximately 47 kilometres south of the application area (GIS Database). The mapped groundwater salinity is between approximately 14,000 to 35,000 milligrams per total dissolved solids which is described as saline (GIS Database).
Flora	There are no Threatened flora species within the application area or local surrounds (20 kilometres) (GIS Database). There are nine priority flora species within the local surrounds (20 kilometres) (GIS Database).
Ecological communities	There are no Threatened Ecological Communities or Priority Ecological Communities within the application area or local surrounds (20 kilometres) (GIS Database).
Fauna	There are two conservation significant fauna species that have been recorded within the local surrounds (20 kilometres) (GIS Database) and two conservation significant invertebrates that occur within the Coolgardie bioregion (GIS Database).
Fauna habitat	A targeted fauna survey for malleefowl, arid bronze azure butterfly (ABAB) and inland hairstreak butterfly was conducted by Woolard Consulting (2025), and Leanne James Environment, in April 2024 and January 2025. The following fauna habitats were considered suitable for the targeted fauna species: VT1: <i>Eucalyptus salmonophloia</i> woodland/ <i>Senna artemisioides</i> subsp. <i>filifolia</i>, <i>Scaevola spinescens</i>, <i>Santalum acuminatum</i> open shrubland with patches of <i>Eucalyptus lesouefii</i> woodland on plains; VT2: <i>Acacia caesaneura</i>, <i>A. aneura</i>, <i>A. ramulosa</i> tall sparse shrubland over <i>Acacia ramulosa</i>, <i>Grevillea oligomera</i> shrubland over <i>Prostanthera grylloana</i> low sparse shrubland on low gravelly rises; and VT7: <i>Eucalyptus salmonophloia</i> woodland over <i>Eremophila scoparia</i> open shrubland over <i>Atriplex nummularia</i>, <i>Cratystylis subspinescens</i>, <i>Eremophila scoparia</i>, <i>Acacia hemiteles</i> low sparse shrubland on plains.

A.2. Vegetation extent

	Pre-European area (ha)	Current extent (ha)	Extent remaining (%)	Current extent in all DBCA managed land (ha)	Current extent in all DBCA Managed Land (proportion of pre-European extent) (%)
IBRA Bioregion - Murchison	28,120,586.77	28,044,823.42	99.73	2,185,987.96	7.77
Beard vegetation associations - State					
Veg Assoc No. 20	1,295,103.39	1,292,474.58	99.80	250,985.57	19.38
Veg Assoc No. 1413	1,679,916.32	1,286,855.48	76.60	222,015.35	13.22
Beard vegetation associations - Bioregion					
Veg Assoc No. 20	1,174,259.17	1,171,630.81	99.78	181,845.19	15.49
Veg Assoc No. 1413	29,688.38	29,688.38	100.00	14,381.81	48.44

Government of Western Australia (2019)

A.3. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (Appendix A.1), and biological survey information, impacts to the following conservation significant flora required further consideration.

Species name	Conservation status	Suitable habitat features? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Likelihood of occurrence
<i>Hysterobaeckea ochropetala</i> subsp. <i>cometes</i>	P3	Y	<5	29	Possible – discussed in Section 3.2.1
<i>Homalocalyx grandiflorus</i>	P3	Y	<15	16	Possibly – discussed in Section 3.2.1
<i>Eucalyptus crucis</i> subsp. <i>crucis</i>	T	N	<20	45	Unlikely
<i>Pterostylis virens</i>	P3	N	<20	17	Unlikely
<i>Pterostylis elegantissima</i>	P1	N	<20	3	Unlikely
<i>Eucalyptus formanii</i> subsp. <i>circulata</i>	P4	N	<20	67	Unlikely
<i>Pterostylis xerampelina</i>	P1	N	<20	15	Unlikely
<i>Wurmbea murchisoniana</i>	P4	N	<20	36	Unlikely
<i>Goodenia berringbinensis</i>	P4	N	<20	33	Unlikely

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

A.4. Fauna analysis table

The following conservation significant fauna species have been recorded within 20 kilometres of the application area (GIS Database).

Species name	Conservation status	Suitable habitat features? [Y/N]	Distance of closest record to application area (km)	Number of known records (local area)	Likelihood of occurrence
Malleefowl (<i>Leipoa ocellata</i>)	VU	Y	<5	12	Possible – discussed in Section 3.2.2
Peregrine falcon (<i>Falco peregrinus</i>)	OS	N	<20	2	Possible – discussed in Section 3.2.2
Inland hairstreak butterfly (<i>Jalmenus aridus</i>)	P4	Y	Unknown	Unknown	Unlikely – discussed in Section 3.2.2
Arid bronze azure butterfly (<i>Ogyris petrina</i>)	CR	Y	Unknown	Unknown	Unlikely – discussed in Section 3.2.2

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, MI: migratory, CD: conservation dependent, OS: other specially protected, P: priority

Appendix B. 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 area proposed to be cleared contains suitable habitat for conservation significant flora and fauna.	May be at variance	Yes <i>Refer to Section 3.2.1, above.</i>
<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> The area proposed to be cleared may contain habitat necessary for the maintenance of conservation significant fauna.	May be at variance	Yes <i>Refer to Section 3.2.2, above.</i>

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> There are no known records of Threatened flora within the application area (GIS Database). The flora survey did not record any species of Threatened flora (JB Botanical Consulting, 2025).	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> No Threatened Ecological Communities (TEC) or Priority Ecological Communities (PEC)s have been recorded within the application area, and there are no TECs mapped near 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). Over 99 per cent of the pre-European vegetation still exists in the Murchison Bioregion (Government of Western Australia, 2019). The vegetation proposed to be cleared is not considered to be part of a significant ecological linkage in the local area.	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> The proposed area to be cleared intersects with the Credo Station (NRS) which is an ex-pastoral lease now managed by the Department of Biodiversity, Conservation and Attractions (DBCA) (OBM, 2025; GIS Database).	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> There are no permanent watercourses or wetlands within the area proposed to be cleared (GIS Database). There is one non-perennial, minor watercourse in the immediate surrounds of the application area (GIS Database). None of the mapped vegetation types were associated with watercourses and as a result, the proposed clearing is unlikely to be at variance with this principle.	Not likely to be 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 systems within the application area are susceptible to erosion particularly when native vegetation is removed from the area (Waddell & Galloway, 2023). It is noted that perennial shrub cover within the application area and disturbance of the stony mantle will occur and as a result, management practices must be implemented to minimise and manage the potential impacts to land degradation. Potential land degradation can be minimised and managed to be environmentally acceptable by implementing a staged clearing condition.	May be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
<u>Principle (i):</u> “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.” <u>Assessment:</u> The closest Public Drinking Water Source Area (PDWSA) is located approximately 40 kilometres northeast of the application area (GIS Database). There are no permanent watercourses or wetlands within the area proposed to be cleared, however, there is a non-perennial watercourse located nearby (GIS Database). The proposed clearing is unlikely to result in significant changes to surface water quality. The average annual rainfall in the local area is 257.7 millimetres (BoM, 2026). Average annual evaporation is between 2,400 and 2,800 millimetres per year, exceeding rainfall (BoM, 2006). As evaporation rates exceed rainfall, groundwater recharge is likely to be minimal. Therefore, the proposed clearing is unlikely to result in the deterioration of groundwater quality.	Not likely to be at variance	No
<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> The Kalgoorlie area receives evenly distributed but unreliable annual rainfall, with low pressure systems and cold fronts from the southwest generating winter rainfall, and intense thunderstorms or ex-tropical cyclones generating summer rainfall (Milewski, 1992). Flooding may occur following intense rainfall events, however the incidence or intensity of flooding is not likely to be significantly influenced by the proposed vegetation clearing.	Not likely to be at variance	No

Appendix C. 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 D. Photographs of the vegetation

The following vegetation units were identified by Jenny Borger Botanical Consulting (2025).



Figure 1. **VT1:** *Eucalyptus salmonophloia* woodland/ *Senna artemisioides* subsp. *filifolia*, *Scaevola spinescens*, *Santalum acuminatum* open shrubland with patches of *Eucalyptus lesouefii* woodland on plains.



Figure 2. **VT2:** *Acacia caesaneura*, *A. aneura*, *A. ramulosa* tall sparse shrubland over *Acacia ramulosa*, *Grevillea oligomera* shrubland over *Prostanthera grylloana* low sparse shrubland on low gravelly rises.



Figure 3. **VT3:** *Acacia aneura* tall shrubland patches and *Eucalyptus oleosa* subsp. *oleosa* open woodland over *Iseilema membranaceum*, *Goodenia* sp. low open tussock grassland on alluvial plains with crabholes.



Figure 4. **VT4:** *Casuarina pauper* open woodland over *Ptilotus obovatus*, *Mairena* spp., *Atriplex vesicaria* low open shrubland on ironstone plains.



Figure 5. **VT5:** *Casuarina pauper*, *Pittosporum angustifolium* low open woodland over *Eremophila alternifolia*, *E. glabra* subsp. *glabra*, *Pimelea microcephala*, *Acacia burkittii*, *Atriplex nummularia* open shrubland; alluvial plain with incised drainage tracts.



Figure 6. **VT6:** *Eucalyptus concinna* mallee woodland over *Acacia hemiteles*, *A. burkittii* isolated shrubs; alluvial plain with crabholes.



Figure 7. **VT7:** *Eucalyptus salmonophloia* woodland over *Eremophila scoparia* open shrubland over *Atriplex nummularia*, *Cratystylis subspinescens*, *Eremophila scoparia*, *Acacia hemiteles* low sparse shrubland on plains.

Appendix E. Sources of information

E.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 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)
- Hydrological Zones of Western Australia (DPIRD-069)
- IBRA Vegetation Statistics
- IBSA Survey Details (DWER-118)
- Local Government Area (LGA) Boundaries (LGATE-233)
- Localities (LGATE-234)
- Medium Scale Topo Contour (Line) (LGATE-015)
- Medium Scale Topo Water (Line) (LGATE-018)
- Medium Scale Topo Water (Polygon) (LGATE-016)
- Native Title (Determination) (LGATE-066)
- Native Vegetation Extent (DPIRD-005)
- Pre-European Vegetation (DPIRD-006)
- Public Drinking Water Source Areas (DWER-033)
- 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)
- Soil Landscape Mapping - Systems (DPIRD-064)
- Surface Water Management Areas (DWER-041)
- Townsites (LGATE-248)
- WA Now Aerial Imagery

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)

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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 [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.