



# Clearing Permit Decision Report

## 1. Application details and outcomes

### 1.1. Permit application details

Permit number:	11300/1
Permit type:	Purpose permit
Applicant name:	NM Gold Operations Pty Ltd
Application received:	20 October 2025
Application area:	26.6 hectares
Purpose of clearing:	Dewatering infrastructure
Method of clearing:	Mechanical removal
Tenure:	Miscellaneous Licences 51/138 and 51/139
Location (LGA area):	Shire of Meekatharra
Colloquial name:	Garden Gully Dewatering Infrastructure

### 1.2. Description of clearing activities

NM Gold Operations Pty Ltd (NMGO) proposes to clear up to 26.6 hectares of native vegetation within a boundary of approximately 168 hectares, for the purpose of dewatering infrastructure (NMGO, 2025). The project is located approximately 6.5 kilometres north of Meekatharra, within the Shire of Meekatharra (GIS Database).

The application is to allow for the construction of dewatering infrastructure required to dewater open pits at the Garden Gully Project (NMGO, 2025). Miscellaneous Licence 51/138 will contain dewatering infrastructure to allow the transfer of excess water to the Sabbath Pit (MBS Environmental, 2025). Miscellaneous Licence 51/139 will contain dewatering infrastructure to allow the transfer of excess water to the Five Mile Well Pit (MBS Environmental, 2025).

### 1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	5 March 2026
Decision area:	26.6 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 F), the results of flora and vegetation surveys (Appendix D and Appendix E), the clearing principles set out in Schedule 5 of the EP Act (Appendix B), proposed avoidance and minimisation measures (Section 3.1), and any other matters considered relevant to the assessment (Section 3.3). The Delegated Officer also took into consideration the purpose of clearing to allow for the construction of dewatering infrastructure.

The assessment identified that the proposed clearing may result in:

- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values;
- impacts to conservation significant flora, namely the clearing of *Calytrix verruculosa*, and loss of suitable habitat for *Indigofera rotula* and *Grevillea inconspicua*;
- increased risk of fauna injury or mortality;
- the clearing of vegetation associated with a watercourse; and
- potential land degradation in the form of water erosion and consequent sedimentation of local watercourses.

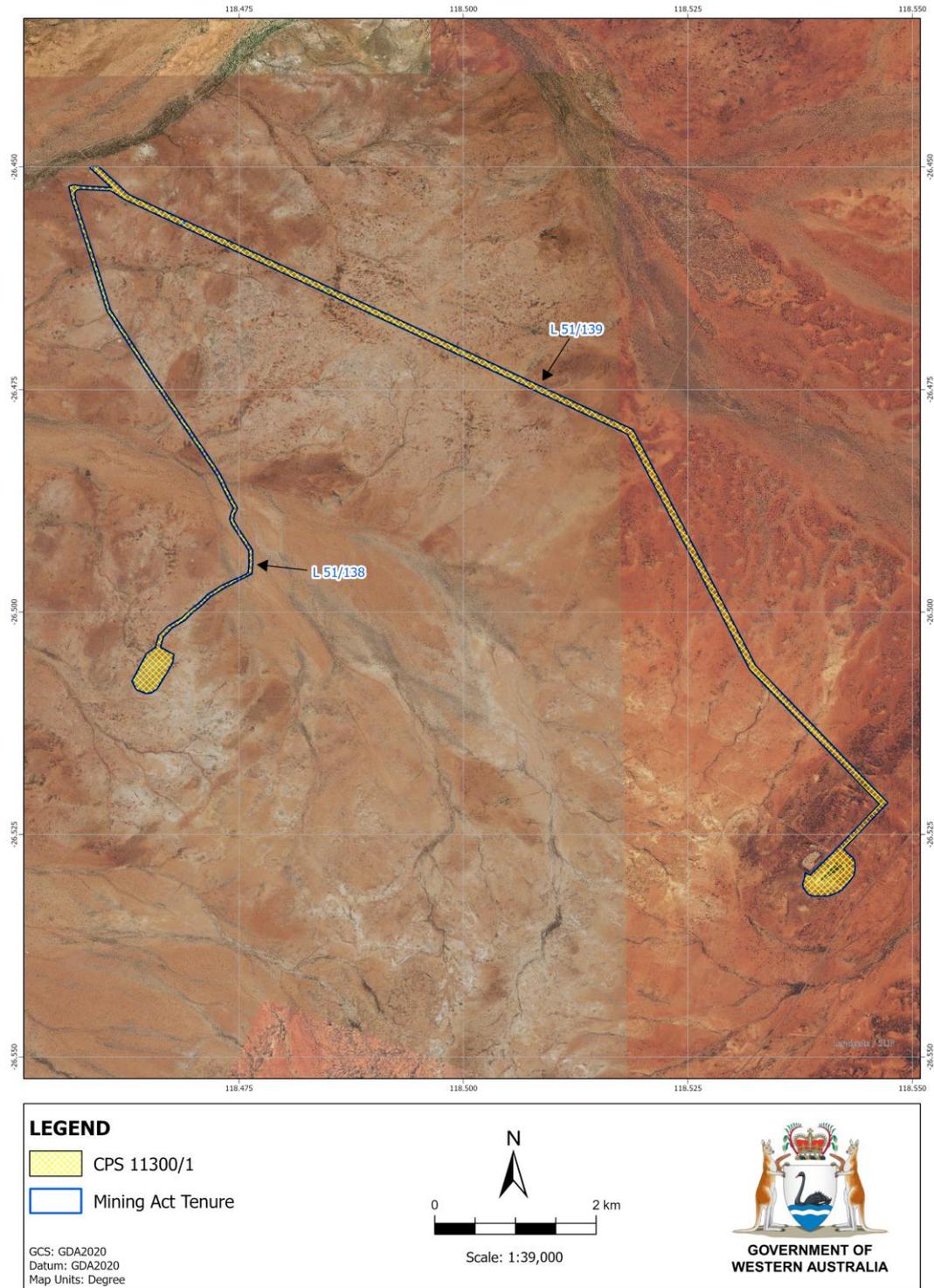
After consideration of the available information, as well as the applicant's minimisation and mitigation measures (Section 3.1), the Delegated Officer determined the proposed clearing term can be minimised and managed to be unlikely to lead to an unacceptable risk to environmental values.

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;
- avoiding the clearing of, and within 10 metres of, any recorded individuals of *Calytrix verruculosa*;
- a watercourse management condition;
- 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 three months after undertaking clearing to reduce the risk of erosion.

**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 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)
- *Biosecurity and Agriculture Management Act 2007* (BAM 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, December 2014)
- *Procedure: Native vegetation clearing permits* (DWER, October 2021)
- Technical guidance – *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016)
- Technical guidance – *Terrestrial Fauna Surveys for Environmental Impact Assessment* (EPA, 2020)

## 3. Detailed assessment of application

### 3.1. Avoidance and mitigation measures

The applicant submitted management and mitigation strategies to address potential impacts of clearing, based on an assessment against the ten clearing principles. These management and mitigation strategies are contained in the below table (MBS Environmental, 2025):

Clearing principle	Management and mitigation strategies
Clearing principle (a)	<ul style="list-style-type: none"> <li>• Minimising the area requiring vegetation clearing;</li> <li>• utilise existing disturbed areas where possible;</li> <li>• <i>Calytrix verruculosa</i> to be clearly marked and GPS coordinates of their locations noted prior to clearing, to avoid accidental direct disturbance; a minimum buffer of 10 metres around priority flora species will be implemented;</li> <li>• manage land clearing using an internal Land Clearing Procedure;</li> <li>• clearly delineate the clearing area with survey pegs and flagging tape to ensure that only the area required is cleared;</li> <li>• implement a procedure to record the amount of clearing undertaken and report the cumulative total in the AER and Mine Rehabilitation Fund (MRF) reporting;</li> <li>• vehicle hygiene procedures will be implemented to minimise entry of weeds and soil borne diseases;</li> <li>• dust control measures will be conducted as required;</li> <li>• stockpiling topsoil for later use in rehabilitation;</li> <li>• progressive rehabilitation in completed areas where possible;</li> <li>• implementing speed limits to minimise dust emissions and risk of fauna injury or mortality due to vehicle traffic; and</li> <li>• all personnel will undertake a site induction which will include the importance of flora and fauna management.</li> </ul>
Clearing principle (b)	<ul style="list-style-type: none"> <li>• Minimising the area requiring vegetation clearing;</li> <li>• utilise existing disturbed areas where possible;</li> <li>• design roads and infrastructure to avoid fauna habitat where possible;</li> <li>• laying pipeline infrastructure within a shallow trench to prevent potential entrapment of fauna;</li> <li>• manage land clearing using an internal Land Clearing Procedure;</li> <li>• clearly delineate the clearing area with survey pegs and flagging tape to ensure that only the area required is cleared;</li> <li>• implement a procedure to record the amount of clearing undertaken and report the cumulative total in the AER and Mine Rehabilitation Fund (MRF) reporting;</li> <li>• dust control measures will be conducted as required;</li> <li>• stockpiling topsoil for later use in rehabilitation;</li> <li>• progressive rehabilitation in completed areas where possible;</li> <li>• implementing speed limits to minimise dust emissions and risk of fauna injury or mortality due to vehicle traffic; and</li> </ul>

	<ul style="list-style-type: none"> <li>all personnel will undertake a site induction which will include the importance of flora and fauna management.</li> </ul>
Clearing principle (c)	<ul style="list-style-type: none"> <li>Utilise existing disturbed areas where possible;</li> <li>manage land clearing using an internal Land Clearing Procedure;</li> <li>clearly delineate the clearing area with survey pegs and flagging tape to ensure that only the area required is cleared;</li> <li>implement a procedure to record the amount of clearing undertaken and report the cumulative total in the AER and Mine Rehabilitation Fund (MRF) reporting;</li> <li>weed hygiene practices will be implemented and site weed control will be conducted as required; and</li> <li>all personnel will undertake a site induction which will include the importance of flora and fauna management.</li> </ul>
Clearing principle (g)	<ul style="list-style-type: none"> <li>Minimising the area requiring vegetation clearing;</li> <li>confining vehicle movements to defined roads and tracks;</li> <li>conducting topsoil stripping activities during periods of low winds;</li> <li>stockpiling topsoil for later use in rehabilitation;</li> <li>storing hydrocarbons and reagents in bunded areas and applying spill response procedures;</li> <li>progressive rehabilitation in completed areas to minimise areas exposed where possible;</li> <li>scarifying or deep ripping (as appropriate) compacted tracks and roads as part of rehabilitation;</li> <li>establishment of surface water management infrastructure to direct surface water flow to natural drainage channels;</li> <li>monitoring of high-risk erosion events, such as extreme weather, to mitigate impacts as far as reasonably practicable; and</li> <li>dust suppression via water cart where practicable.</li> </ul>
Clearing principle (i)	<ul style="list-style-type: none"> <li>Utilise existing disturbed areas where possible;</li> <li>clearing will not be undertaken during rainfall events that result in surface water flows, to reduce risk of erosion and elevated turbidity;</li> <li>where necessary, suitable floodways, drains and culverts will be installed to transfer water past infrastructure and return it to its natural flow path;</li> <li>water pipelines will be located within bunds to prevent spillages;</li> <li>hydrocarbons will be stored outside the permit boundary; spill kits will be maintained to allow for containment and treatment of spillages of hydrocarbons from clearing equipment; and</li> <li>progressive rehabilitation in completed areas to minimise areas exposed where possible.</li> </ul>
Clearing principle (j)	<ul style="list-style-type: none"> <li>Diversions will be installed where necessary to direct surface flow away from cleared areas and return flows to natural paths; and</li> <li>culverts or drains will be installed where the roads and pipeline infrastructure cross ephemeral drainages to prevent impediment of flows.</li> </ul>

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 biological values (flora and fauna). 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

*Calytrix verruculosa*, Priority 3, inhabits sandy clay soils in the Murchison bioregion (WAH, 1998-). The survey by Botanica Consulting (2025) identified approximately 60 *Calytrix verruculosa* individuals, growing in six locations (shown in Figure 2, Appendix E). Four of these locations, totalling six individuals, occur within the application area (Botanica Consulting, 2025). As approximately 50 *Calytrix verruculosa* individuals have been recorded outside of the application area, and the applicant has committed to avoiding *Calytrix verruculosa* within the application area with a buffer of ten metres, this species is unlikely to be significantly impacted by the proposed clearing.

*Indigofera rotula*, Priority 3, is associated with watercourses or granite domes (WAH, 1998-; Wilson, 2021). The nearest record of *Indigofera rotula* is less than one kilometre from the application area, with the species growing in red sandy loam soils with a gravelly surface on a roadside (GIS Database). It has also been locally recorded within watercourses (GIS Database). *Indigofera rotula* flowers from May to September, meaning it may not have been detectable in the Native Vegetation Solutions (2019) and Botanica Consulting (2025) surveys, which were conducted in March and April (WAH, 1998-). As suitable *Indigofera rotula* habitat within the application area has not been surveyed during the optimal survey timing for this species, *Indigofera rotula* may occur undetected in the application area (Wilson, 2021). However, as *Indigofera rotula* is known from 17 Western Australian Herbarium (1998-) records across four bioregions, the proposed clearing is unlikely to be significant to this species, if

it were to occur within the application area. Additionally, impacts to drainage habitat can be reduced by implementing a watercourse management condition on the permit.

*Grevillea inconspicua*, Priority 4, was recorded less than one kilometre from the application area, within the boundary of CPS 10902/1, during the survey by Botanica Consulting (2024). This record consisted of approximately 30 individuals growing in a drainage line (Botanica Consulting, 2024). As this species is known from 63 Western Australian Herbarium (1998-) records within the Murchison bioregion, and has been recorded within the conservation estate, the proposed clearing is unlikely to be significant to this species, if it were to occur within the application area. Additionally, impacts to drainage habitat can be reduced by implementing a watercourse management condition on the permit.

#### Conclusion

Based on the above assessment, the proposed clearing will not result in significant impacts to priority flora, provided the applicant complies with the proposed avoidance and minimisation measures. To ensure avoidance and minimisation measures are implemented, conditions will be required on the clearing permit.

For the reasons set out above, it is considered that the impacts of the proposed clearing on priority flora and their habitats can be managed by avoiding clearing *Calytrix verruculosa* and within a ten metre buffer of its known locations; minimising the extent of clearing; and by implementing a watercourse management condition.

#### Conditions

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

- avoiding the clearing of, and within 10 metres of, any recorded individuals of *Calytrix verruculosa*;
- avoid, minimise to reduce the impacts and extent of clearing; and
- a watercourse management condition.

### 3.2.2. *Biological values (fauna) - Clearing principles (a) and (b)*

#### Assessment

The long-tailed dunnart (*Antechinomys longicaudatus*), Priority 4, inhabits rocky areas (van Dyck & Strahan, 2008). Within the application area, the *Acacia* woodland on a rocky hillslope habitat, is suitable for the long-tailed dunnart (Botanica Consulting, 2025; MBS Environmental, 2025). The nearest record of long-tailed dunnart is mapped approximately seven kilometres south of the application area (GIS Database). However, the site description listed for this record is '12 kilometres southwest of Meekatharra' (GIS Database). Therefore, the record is likely to be located approximately 18 kilometres south of the application area. As suitable habitat for the long-tailed dunnart likely extends outside of the application area, clearing is for linear infrastructure, and the long-tailed dunnart is capable of opportunistically invading new habitats, the proposed clearing of habitat is unlikely to be significant to the conservation of this species (Friend et al., 1997). However, mechanical clearing poses the risk of injury or mortality to long-tailed dunnart individuals if they occur within the application area.

Peregrine falcons (*Falco peregrinus*), Other Specially Protected, can occur in most habitats (Australian Museum, 2019). As habitat for this species is not limited, and this species is highly mobile and widely ranging, it is unlikely to be impacted by the proposed clearing (Australian Museum, 2019).

The fork-tailed swift (*Apus pacificus*), Migratory, is an aerial species (Commonwealth of Australia, 2008). It may occur in the airspace above the application area. The fork-tailed swift is unlikely to be impacted by the proposed clearing, as it does not utilise vegetation as habitat.

Grey falcons (*Falco hypoleucos*), Vulnerable, has a wide distribution across much of arid Australia, occurring mainly on lightly wooded plains and along watercourses (Garnett & Crowley, 2000). Suitable breeding habitat consists of drainage lines with suitably sized *Eucalypts* (Garnett & Crowley, 2000). The *Acacia* and/or *Eucalypt* woodland in drainage line habitat within the application area may be suitable for grey falcon breeding (Botanica Consulting, 2025). As drainage habitat extends outside of the application area, nearby major drainage lines are likely to be more suitable for grey falcon breeding, and no evidence of grey falcons has been detected within the application area, the area proposed to be cleared is unlikely to represent critical habitat for grey falcons (Botanica Consulting, 2024; 2025; GIS Database).

#### Conclusion

Based on the above assessment, the proposed clearing is unlikely to represent a loss of critical habitat for conservation significant fauna. However, mechanical clearing poses the risk of injury or mortality to long-tailed dunnart individuals if they occur within the application area.

#### Conditions

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

- undertake slow, progressive one-directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity.

### 3.3. **Relevant planning instruments and other matters**

The clearing permit amendment application was advertised on 10 February 2026 by the Department of Mines, Petroleum and Exploration inviting submissions from the public. No submissions were received in relation to this application.

There are two native title claims (WCD2017/007 - Wajarri Yamatji Part A and WCD2018/002 - Wajarri Yamatji Part B) over the area under application (DPLH, 2026; GIS Database). These claims have 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 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.

Other relevant authorisations required for the proposed land use include:

- A Programme of Work approved under the *Mining Act 1978*
- 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	<p>The application area is part of an expansive tract of native vegetation in the extensive land use zone of Western Australia. It is located within the Western Murchison subregion of the Murchison bioregion (GIS Database).</p> <p>The application area is adjacent to granted clearing permit CPS 10902/1, which authorises the clearing of up to 93.96 hectares of native vegetation within a boundary of 204 hectares, for mineral production and associated infrastructure at the Garden Gully Project (DEMIRS, 2025; GIS Database).</p> <p>Approximately 99 percent of the local area (50 kilometre radius from the application area) remains uncleared (GIS Database).</p>								
Ecological linkage	According to available databases, the application area does not contain any known or mapped ecological linkages (GIS Database).								
Conservation areas	The nearest legislated conservation area is Tjwarl National Park located approximately 117 kilometres southeast of the application area (MBS Environmental, 2025; GIS Database).								
Vegetation description	<p>The vegetation of the application area is broadly mapped as the following Beard vegetation associations:</p> <p><b>18:</b> Low woodland, open low woodland or sparse woodland; mulga (<i>Acacia aneura</i> and close relatives); and</p> <p><b>29:</b> Sparse low woodland; mulga (<i>Acacia aneura</i> and close relatives), discontinuous in scattered groups (GIS Database).</p> <p>Flora and vegetation surveys of the application area have been conducted by Native Vegetation Solutions (2019) and Botanica Consulting (2024; 2025) in March 2019, June 2024 and April 2025. The following vegetation groups were recorded within the application area:</p> <ul style="list-style-type: none"> <li>• <i>Acacia</i> open woodland;</li> <li>• <i>Acacia</i> forest woodland;</li> <li>• <i>Eucalypt</i> woodland;</li> <li>• open <i>Acacia</i> shrubland;</li> <li>• mulga creekline vegetation;</li> <li>• <i>Tecticornia</i> open shrubland; and</li> <li>• cleared (MBS Environmental, 2025).</li> </ul> <p>Vegetation groups are further described to a community level, with these descriptions and representative photographs available in Appendix D.</p>								
Vegetation condition	<p>The vegetation surveys (Botanica Consulting, 2024; 2025; NVS, 2019) indicate the vegetation within the proposed clearing area is in good to completely degraded (Keighery, 1994) condition.</p> <p>As the proposed clearing is located within the Eremaean Botanical Province, these condition ratings have been converted to the Trudgen (1991) condition rating scale (GIS Database). Therefore, the vegetation within the proposed clearing area ranges from poor to completely degraded Trudgen (1991) condition.</p> <p>The full Trudgen (1991) condition rating scale is provided in Appendix C.</p>								
Climate and landform	<p>The climate of the Murchison bioregion is described as arid, with the nearest weather station (Sherwood) recording an average rainfall of approximately 219.8 millimetres per year (BoM, 2026; CALM, 2002).</p> <p>The application area is mapped at elevations of 480-520 metres Australian Height Datum (GIS Database). The application area is described as rocky hillslopes, plains, and drainage depressions (MBS Environmental, 2025).</p>								
Soil description	<p>The soils within the application area are mapped as the following land systems (DPIRD, 2026):</p> <table border="1"> <thead> <tr> <th>System</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Belele system (272Be)</td> <td>Hardpan wash plains with acacia tall shrublands, and low sandy banks supporting shrublands with wanderrie grasses</td> </tr> <tr> <td>Sherwood system (272Sh)</td> <td>Breakaways, kaolinised footslopes and extensive gently sloping plains on granite supporting mulga shrublands and minor halophytic shrublands</td> </tr> <tr> <td>Violet system (272Vi)</td> <td>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</td> </tr> </tbody> </table>	System	Description	Belele system (272Be)	Hardpan wash plains with acacia tall shrublands, and low sandy banks supporting shrublands with wanderrie grasses	Sherwood system (272Sh)	Breakaways, kaolinised footslopes and extensive gently sloping plains on granite supporting mulga shrublands and minor halophytic shrublands	Violet system (272Vi)	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
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Characteristic	Details							
	Wiluna system (272Wi)	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						
	Yandil system (272Yn)	Flat hardpan wash plains with mantles of small pebbles and gravels; supporting groved mulga shrublands and occasional wanderrie grasses						
Land degradation risk	<p>The lower footslopes and drainage tracts of the Sherwood land system generally have fragile soils which are highly susceptible to water erosion (Payne et al., 1998). Erosion of these soils can be exacerbated by clearing (Payne et al., 1998).</p> <p>Abundant mantles in the Violet land system provide effective protection against soil erosion, except where the soil surface has been disturbed or in narrow drainage tracts (Payne et al., 1998). These areas are mildly to moderately susceptible to water erosion (Payne et al., 1998).</p> <p>Narrow drainage tracts in the Wiluna land system are moderately susceptible to water erosion (Payne et al., 1998). In areas of the Yandil system without mantles, particularly drainage tracts, soils are moderately susceptible to water erosion (Curry et al., 1994).</p> <p>The Belele land system is mildly susceptible to erosion when vegetation cover is removed or vegetation is degraded (Curry et al., 1994).</p>							
Waterbodies	<p>The desktop assessment and aerial imagery indicated that several minor, non-perennial watercourses transect the area proposed to be cleared (GIS Database).</p> <p>Garden Gully Creek is a major, non-perennial watercourse approximately 100 metres north of the application area (GIS Database). This watercourse drains in a westerly direction to the Hope River (GIS Database).</p>							
Hydrogeography	<p>The application area is not within any mapped Public Drinking Water Source Areas (PDWSA) or legislated surface water areas (GIS Database). The nearest PDWSA is the Meekatharra Water Reserve located approximately 430 metres east of the application area (GIS Database).</p> <p>The application area is located within the East Murchison Groundwater Area proclaimed under the <i>Rights in Water and Irrigation Act 1914</i> (GIS Database).</p> <p>The groundwater salinity of the application area is mapped as being 1,000-3,000 total dissolved solids milligrams per litre, which is described as brackish water (NWGA, 2023; GIS Database).</p>							
Flora	<p>23 priority flora species have been recorded within the local area (50 kilometre radius of the application area). One species (<i>Calytrix verruculosa</i>, Priority 3) has been recorded within the application area (Botanica Consulting, 2025).</p>							
Ecological communities	<p>Nine priority ecological communities (PECs) have been recorded within the local area (50 kilometre radius of the application area), including three land system PECs and six calcrete groundwater PECs (GIS Database).</p> <p>No threatened ecological communities (TECs) have been recorded within the local area (50 kilometre radius of the application area) (GIS Database). One TEC occurs in the Murchison bioregion, being the Depot Springs stygofauna community (DBCA, 2023).</p> <p>Surveys of the application area did not detect any vegetation representative of a PEC or TEC (Botanica Consulting, 2024; 2025; NVS, 2019).</p>							
Fauna	<p>Ten conservation significant fauna species have been recorded within the local area (50 kilometre radius of the application area), including seven birds, one mammal, one reptile and one invertebrate (GIS Database).</p> <p>The grey falcon was not recorded within 50 kilometres, but has been included in this assessment, as it is considered possibly occurring (Botanica Consulting, 2025).</p>							
Fauna habitat	<p>Botanica Consulting (2025) undertook a basic fauna assessment of Miscellaneous Licence 51/139, identifying three fauna habitats. Based on the flora and vegetation assessment by Native Vegetation Solutions (2019), the rest of the application area is inferred to comprise of the same three habitats as described by Botanica Consulting (2025) (MBS Environmental, 2025). These habitats are described in the below table (MBS Environmental, 2025):</p> <table border="1"> <thead> <tr> <th>Habitat type</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Cleared</td> <td> <ul style="list-style-type: none"> <li>Land cleared of native vegetation</li> </ul> </td> </tr> <tr> <td>Acacia open woodland on rock or clay-loam plain</td> <td> <ul style="list-style-type: none"> <li>Open <i>Acacia</i> woodland over <i>Eremophila</i> shrubland</li> <li>Ground not particularly suited to burrowing species</li> <li>Low diversity vegetation strata supporting a reduced avifauna assemblage</li> </ul> </td> </tr> </tbody> </table>		Habitat type	Description	Cleared	<ul style="list-style-type: none"> <li>Land cleared of native vegetation</li> </ul>	Acacia open woodland on rock or clay-loam plain	<ul style="list-style-type: none"> <li>Open <i>Acacia</i> woodland over <i>Eremophila</i> shrubland</li> <li>Ground not particularly suited to burrowing species</li> <li>Low diversity vegetation strata supporting a reduced avifauna assemblage</li> </ul>
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Characteristic	Details	
		<ul style="list-style-type: none"> <li>• Low vegetation density and low leaf litter supporting some small reptiles</li> </ul>
	<i>Acacia</i> and/or <i>Eucalypt</i> woodland in drainage line	<ul style="list-style-type: none"> <li>• Closed <i>Acacia</i> and/or <i>Eucalypt</i> woodland over mixed <i>Acacia</i> and <i>Eremophila</i> shrubland</li> <li>• Ground moderately suited to burrowing species in some areas</li> <li>• Moderate diversity vegetation strata supporting a good avifauna assemblage</li> <li>• Moderate vegetation density and moderate leaf litter supporting small reptiles</li> </ul>
	<i>Acacia</i> woodland on a rocky hillslope	<ul style="list-style-type: none"> <li>• Open <i>Acacia</i> woodland over <i>Eremophila</i> shrubland</li> <li>• Ground not particularly suited to burrowing species</li> <li>• Potential refuge for small fauna under rocks</li> <li>• Low diversity vegetation strata supporting a reduced avifauna assemblage</li> <li>• Low vegetation density and low leaf litter supporting some small reptiles</li> </ul>

### 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	28,120,587	28,044,823	~99	293,505	1.04
Beard vegetation associations - State					
18	19,892,306	19,843,148	~99	1,317,179	6.62
29	7,903,991	7,898,973	~99	496,368	6.28
Beard vegetation associations - Bioregion (Murchison)					
18	12,403,172	12,363,253	~99	45,094	0.36
29	2,956,382	2,955,695	~99	93,020	3.15

Government of Western Australia (2019)

### A.3. Flora analysis table

The following conservation significant flora species have been recorded within 50 kilometres of the application area (GIS Database).

The likelihood of occurrence for these species were determined by potentially suitable habitat within the application area, species distribution, biological survey information and known regional records (Botanica Consulting, 2024; 2025; Chinnock, 2007; Hammer & Davis, 2018; NVS, 2019; WAH, 1998-; Wilson, 2021; GIS Database).

Species name	Suitable habitat features? [Y/N]	Distance of closest record to application area (km)	Likelihood of occurrence
<b>Priority 1</b>			
<i>Eremophila retropila</i>	Y	<10	Possible
<i>Euploca mitchellii</i>	Y	<10	Unlikely
<i>Lepidium xylodes</i>	Y	<35	Possible
<i>Dicrastylis mitchellii</i>	N	<45	Unlikely
<i>Ptilotus actinocladas</i>	Y	<45	Possible
<i>Rhodanthe sphaerocephala</i>	Y	<45	Possible
<b>Priority 3</b>			
<i>Calytrix verruculosa</i>	Y	0	Recorded – discussed in Section 3.2.1

Species name	Suitable habitat features? [Y/N]	Distance of closest record to application area (km)	Likelihood of occurrence
<i>Indigofera rotula</i>	Y	<1	Likely – discussed in Section 3.2.1
<i>Menkea draboides</i>	Y	<4	Possible
<i>Drummondita miniata</i>	N	<10	Unlikely
<i>Eremophila fasciata</i>	Y	<10	Possible
<i>Homalocalyx echinulatus</i>	N	<10	Unlikely
<i>Ptilotus luteolus</i>	Y	<20	Possible
<i>Hemigenia virescens</i>	Y	<20	Possible
<i>Ptilotus lazaridis</i>	Y	<35	Possible
<i>Tribulus adelacanthus</i>	Y	<45	Possible
<i>Eragrostis</i> sp. Erect spikelets (P.K. Latz 2122)	N	<45	Unlikely
<i>Acacia sclerosperma</i> subsp. <i>glaucescens</i>	Y	<45	Possible
<i>Hibiscus</i> sp. Belele (D.W. Goodall 3417)	Y	<45	Possible
<i>Tecticornia cymbiformis</i>	N	<50	Unlikely
<b>Priority 4</b>			
<i>Grevillea inconspicua</i>	Y	<1	Likely – discussed in Section 3.2.1
<i>Acacia speckii</i>	Y	<10	Possible
<i>Goodenia berringbinensis</i>	Y	<40	Possible

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 50 kilometres of the application area (DBCA, 2025; GIS Database). The grey falcon was not recorded within 50 kilometres, but was included as it was considered possibly occurring based on the fauna desktop assessment by Botanica Consulting (2025).

The likelihood of occurrence for these species were determined by potentially suitable habitat within the application area, species distribution, biological survey information and known regional records (ALA, n.d.; Australian Museum, 2019; Botanica Consulting, 2025; Cogger, 2018; Commonwealth of Australia, 2008; 2020; Garnett & Crowley, 2000; IUCN, 2017; MBS Environmental, 2025; Menkhorst et al., 2019; NVS, 2019; Timms, 2008; van Dyck & Strahan, 2008; GIS Database).

Species name		Conservation status		Suitable habitat features? [Y/N]	Distance of closest record to application area (km)	Likelihood of occurrence
Common	Scientific	WA	EPBC			
Long-tailed dunnart	<i>Antechinomys longicaudatus</i>	P4	-	Y	6.7	Possible – discussed in Section 3.2.2
Peregrine falcon	<i>Falco peregrinus</i>	OS	-	Y	8.1	Possible – discussed in Section 3.2.2
Fork-tailed swift	<i>Apus pacificus</i>	MI	MI	Y	44.1	Possible – discussed in Section 3.2.2
Grey falcon	<i>Falco hypoleucos</i>	VU	VU	Y	Approximately 60	Possible – discussed in Section 3.2.2
West Coast mulga slider	<i>Lerista eupoda</i>	P1	-	Y	41.5	Unlikely
Sharp-tailed sandpiper	<i>Calidris acuminata</i>	MI	MI	N	2.4	Unlikely
Curlew sandpiper	<i>Calidris ferruginea</i>	CR	CR & MI	N	2.4	Unlikely
Gull-billed tern	<i>Gelochelidon nilotica</i>	MI	MI	N	2.4	Unlikely
Common greenshank	<i>Tringa nebularia</i>	MI	MI	N	2.4	Unlikely
Wood sandpiper	<i>Tringa glareola</i>	MI	MI	N	8.1	Unlikely
Fairy shrimp	<i>Branchinella simplex</i>	P1	-	N	49.8	Unlikely

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?
<b>Environmental value: biological values</b>		
<p><u>Principle (a):</u> <i>"Native vegetation should not be cleared if it comprises a high level of biodiversity."</i></p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared contains priority flora species, <i>Calytrix verruculosa</i>.</p> <p>As surveys of the application area did not detect any vegetation representative of a priority ecological community (PEC) or threatened ecological community (TEC), the proposed clearing is unlikely to impact locally occurring PECs (Botanica Consulting, 2024; 2025; NVS, 2019).</p> <p>The proposed clearing is unlikely to represent a loss of critical habitat for conservation significant fauna. However, mechanical clearing poses the risk of injury or mortality to long-tailed dunnart individuals if they occur within the application area.</p>	Not likely to be at variance	Yes <i>Refer to Section 3.2.1 and 3.2.2, above.</i>
<p><u>Principle (b):</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 significant habitat for fauna."</i></p> <p><u>Assessment:</u></p> <p>The proposed clearing is unlikely to represent a loss of critical habitat for conservation significant fauna. However, mechanical clearing poses the risk of injury or mortality to long-tailed dunnart individuals if they occur within the application area.</p>	Not likely to be at variance	Yes <i>Refer to Section 3.2.2, above.</i>
<p><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></p> <p><u>Assessment:</u></p> <p>Given no threatened flora are known to occur in the local area, the area proposed to be cleared is unlikely to contain flora species listed under the BC Act.</p>	Not likely to be at variance	No
<p><u>Principle (d):</u> <i>"Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community."</i></p> <p><u>Assessment:</u></p> <p>Given the only threatened ecological community (TEC) known from the Murchison bioregion is located approximately 215 kilometres from the application area and surveys of the application area did not detect any vegetation representative of a TEC, it is unlikely that the proposed clearing will impact a TEC (DBCA, 2023; Botanica Consulting, 2024; 2025; NVS, 2019; GIS Database).</p>	Not likely to be at variance	No
<b>Environmental value: significant remnant vegetation and conservation areas</b>		
<p><u>Principle (e):</u> <i>"Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."</i></p> <p><u>Assessment:</u></p> <p>The application area falls within the Murchison Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 99 percent of the pre-European vegetation still exists in the IBRA Murchison Bioregion (Government of Western Australia, 2019; Appendix A.2).</p> <p>Approximately 99 percent of the pre-European extent of the Beard vegetation associations present within the application area remains uncleared at both the state and bioregional level (Government of Western Australia, 2019; GIS Database; Appendix A.2).</p> <p>The extent of the native vegetation in the local area is consistent with the national objectives and targets for biodiversity conservation in Australia (Commonwealth of Australia, 2001; Appendix A.2).</p>	Not at variance	No
<p><u>Principle (h):</u> <i>"Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area."</i></p>	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
<p><u>Assessment:</u></p> <p>Given the distance to the nearest conservation area (approximately 117 kilometres), the proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas.</p>		
<b>Environmental value: land and water resources</b>		
<p><u>Principle (f):</u> <i>“Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.”</i></p> <p><u>Assessment:</u></p> <p>Given several minor, non-perennial watercourses are recorded within the application area, the proposed clearing is likely to result in the clearing of vegetation associated with a watercourse.</p> <p><u>Condition:</u></p> <p>To address the above impact, the following management measure will be required as a condition on the clearing permit:</p> <ul style="list-style-type: none"> <li>• a watercourse management condition.</li> </ul>	At variance	No
<p><u>Principle (g):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.”</i></p> <p><u>Assessment:</u></p> <p>The mapped soils within the application area are mildly to highly susceptible to water erosion, particularly in drainage lines, where the soil is disturbed, or vegetation cover removed (Curry et al., 1994; Payne et al., 1998). Noting the extent and location of the application, the proposed clearing may exacerbate erosion and have an appreciable impact on land degradation.</p> <p><u>Conditions:</u></p> <p>To address the above impact, the following management measures will be required as conditions on the clearing permit:</p> <ul style="list-style-type: none"> <li>• a watercourse management condition; and</li> <li>• a staged clearing condition to minimise erosion.</li> </ul>	May be at variance	No
<p><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></p> <p><u>Assessment:</u></p> <p><b>Surface water</b></p> <p>As the mapped soils are mildly to highly susceptible to water erosion, particularly in drainage lines, where the soil is disturbed, or vegetation cover removed, the proposed clearing may result in increased sedimentation of local watercourses (Curry et al., 1994; MBS Environmental, 2025; Payne et al., 1998). This may result in a localised decrease in surface water quality (MBS Environmental, 2025).</p> <p><b>Groundwater</b></p> <p>The Meekatharra Water Reserve protects the alluvial aquifer from which Meekatharra’s drinking water is sourced (Government of Western Australia, 2001). This aquifer is recharged via Garden Gully Creek during sustained rainfall events (Government of Western Australia, 2001). As the average annual potential evaporation is more than ten times the annual rainfall, groundwater recharge is minimal during normal seasonal conditions; this lowers the risk of groundwater quality being affected by the proposed clearing (Government of Western Australia, 2001). Additionally, as the application area is situated outside of the Meekatharra Water Reserve, and this reserve is considered adequate for the protection of this water source, it is unlikely that the proposed clearing will result in the degradation of its water quality (Government of Western Australia, 2001; GIS Database).</p> <p><u>Conditions:</u></p> <p>To address the above impact, the following management measures will be required as conditions on the clearing permit:</p> <ul style="list-style-type: none"> <li>• a watercourse management condition; and</li> <li>• a staged clearing condition to minimise erosion.</li> </ul>	May be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
<p><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.”</p> <p><u>Assessment:</u></p> <p>As the average annual potential evaporation is more than ten times the annual rainfall, drainage lines only flow during periods of sustained rainfall and the likelihood of flooding during normal seasonal conditions is low (Government of Western Australia, 2001). Additionally, as vegetation density within the application area is low, and there is a maximum of 26.6 hectares of clearing proposed, it is unlikely that the proposed clearing will increase the incidence or intensity of flooding (MBS Environmental, 2025).</p>	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. Vegetation communities**

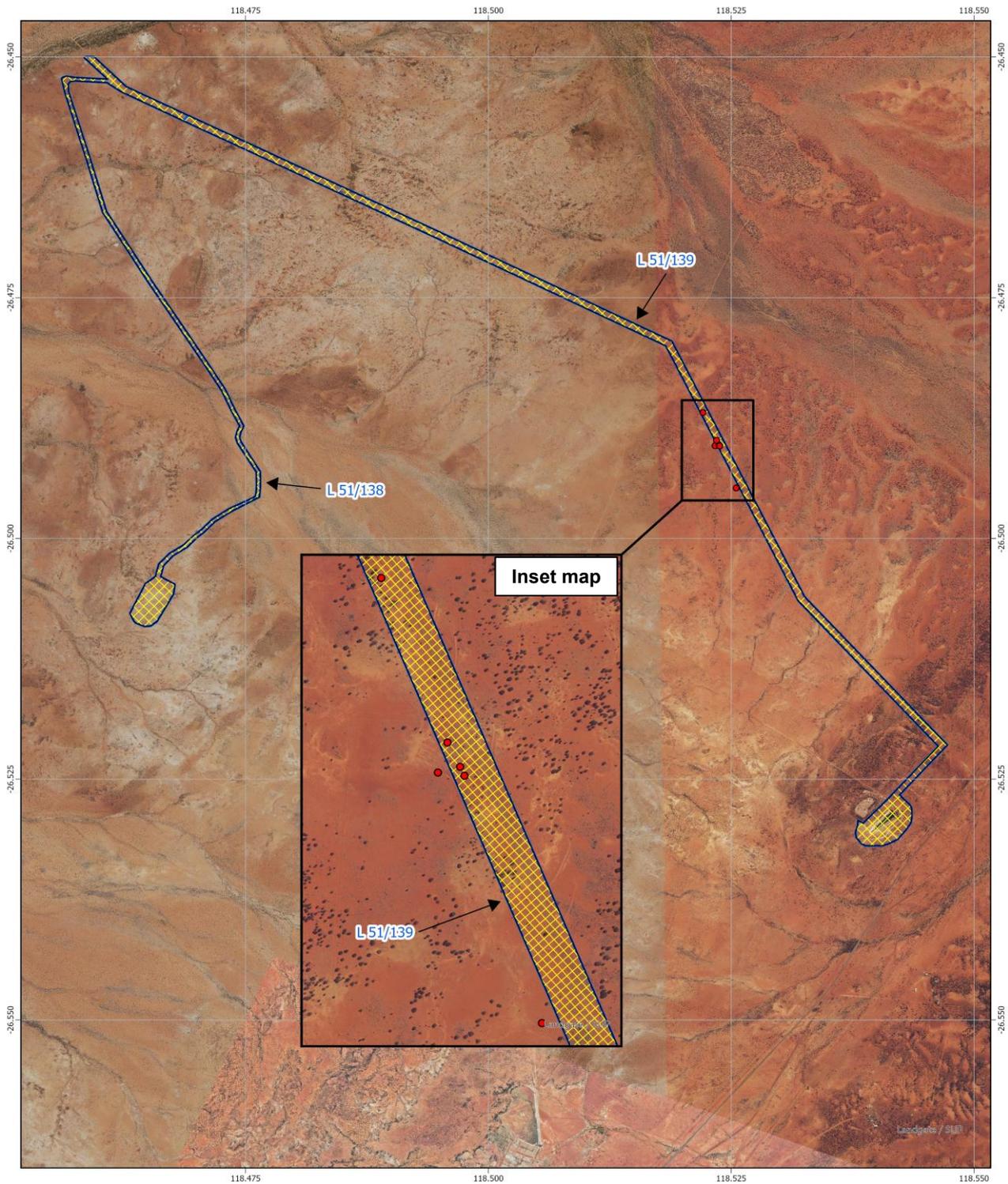
The following vegetation communities have been recorded within the application area (MBS Environmental, 2025):

Vegetation Group	Vegetation Community	Description	Representative Photograph	Source
Acacia open woodland	RHS-AOW1	Mid woodland of <i>Acacia pruinocarpa</i> and <i>A. incurvaneura</i> over mid open shrubland of <i>Eremophila latrobei</i> , <i>E. jucunda</i> and <i>Senna sp.</i> Meekatharra over low sparse shrubland of <i>Maireana triptera</i> on a rocky hillslope.		Botanica Consulting (2024; 2025)

	<p>RP-AOW1</p>	<p>Mid woodland of <i>Acacia pruinocarpa</i> and <i>A. incurvaneura</i> over mid open shrubland of <i>A. grasbyi</i>, <i>Eremophila galeata</i> and <i>Senna sp.</i> Meekatharra over low sparse shrubland of <i>Maireana triptera</i> and <i>Enchylaena tomentosa</i> on a quartz rocky plain.</p>		
	<p>CLP-AOW1</p>	<p>Mid woodland of <i>Acacia incurvaneura</i> over mid shrubland of <i>Eremophila compacta</i> over low sparse shrubland of <i>Solanum lasiophyllum</i> and <i>Aristida contorta</i> on clay loam plain.</p>		
	<p>DD-AOW1</p>	<p>Mid woodland of <i>A. incurvaneura</i> over mid open shrubland of <i>Eremophila galeata</i> over low sparse shrubland of <i>Maireana triptera</i> and <i>Enchylaena tomentosa</i> in a drainage depression.</p>		
<p>Acacia forest woodland</p>	<p>RP-AFW1</p>	<p>Mid open forest of <i>Acacia incurvaneura</i> over mid open shrubland of <i>A. tetragonophylla</i> and <i>Senna sp.</i> Meekatharra over low sparse shrubland of <i>Ptilotus obovatus</i> and <i>Solanum lasiophyllum</i> on a quartz rocky plain.</p>		
	<p>DD-AFW1</p>	<p>Mid open forest of <i>Acacia incurvaneura</i> over mid open shrubland of <i>Acacia tetragonophylla</i>, and <i>Senna sp.</i> Meekatharra over low sparse shrubland of <i>Ptilotus obovatus</i> and <i>Solanum lasiophyllum</i> in drainage depression.</p>		

	CLP-AFW1	Mid open forest of <i>Acacia incurvaneura</i> over mid open shrubland of <i>A. tetragonophylla</i> and <i>Senna</i> sp. Meekatharra over low sparse shrubland of <i>Ptilotus obovatus</i> and <i>Solanum lasiophyllum</i> on a clay loam plain.		
<i>Eucalypt</i> woodland	DD-EFW1	Mid open forest of <i>Eucalyptus camaldulensis</i> over mid open shrubland of <i>Acacia tetragonophylla</i> and <i>Senna</i> sp. Meekatharra over low sparse shrubland of <i>Ptilotus obovatus</i> and <i>Solanum lasiophyllum</i> in drainage depression.		
Open <i>Acacia</i> shrubland	OAC-NVS	Open <i>Acacia</i> shrubland. Dominant species were <i>Acacia aneura</i> , <i>Acacia grasbyi</i> , <i>Acacia prainii</i> and <i>Eremophila galeata</i> .		NVS (2019)
Mulga creekline vegetation	MCV-NVS	Dominant species were <i>Acacia aneura</i> , <i>Acacia craspedocarpa</i> , <i>Acacia pteraneura</i> , <i>Grevillea deflexa</i> , <i>Ptilotus obovatus</i> and <i>Exocarpos aphyllus</i> .		
<i>Tecticornia</i> open shrubland	TOS-NVS	Dominant species was <i>Tecticornia</i> sp. Yoothapina Station.		
Cleared	Cleared	Land cleared of native vegetation.	N/A	Botanica Consulting (2024; 2025), NVS (2019)

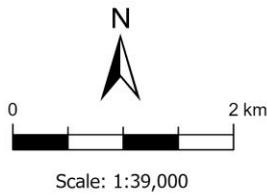
Appendix E. Map of *Calytrix verruculosa* locations



**LEGEND**

- *Calytrix verruculosa* records
- ▨ CPS 11300/1
- ▭ Mining Act Tenure

GCS: GDA2020  
Datum: GDA2020  
Map Units: Degree



**Figure 2. Map of the application area, showing the locations of *Calytrix verruculosa* recorded by Botanica Consulting (2025). The yellow area indicates the area within which conditional authorised clearing can occur under the granted clearing permit. Red points represent a location where *Calytrix verruculosa* was recorded by Botanica Consulting (2025). The inset map shows the locations of *Calytrix verruculosa* recorded by Botanica Consulting (2025) at a larger scale.**

## Appendix F. Sources of information

### F.1. GIS datasets

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

- 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 Referral Proposal (DWER-116)
- 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)
- EPA Referred Schemes Pending (DWER-121)
- EPA Referred Significant Proposals (DWER-120)
- EPA Referred Significant Proposals Pending (DWER-103)
- Geographic Names (GEONOMA) (LGATE-013)
- Groundwater Salinity Statewide (DWER-026)
- IBRA Vegetation Statistics
- 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)
- Reserves (LGATE-227)
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Rivers (DWER-036)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Mapping - Best Available (DPIRD-027)
- Townsites (LGATE-248)
- WA Now Aerial Imagery
- Wild Rivers (DWER-087)

Restricted GIS Databases used:

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

### Acronyms:

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