



Clearing Permit Decision Report

1. Application details and outcomes

1.1. Permit application details

Permit number:	11745/1
Permit type:	Purpose permit
Applicant name:	Norwest Sand & Gravel Pty Ltd
Application received:	13 August 2026
Application area:	25 hectares
Purpose of clearing:	Sand mining and associated activities
Method of clearing:	Mechanical Removal
Tenure:	Mining Lease 45/1195
Location (LGA area):	Town of Port Hedland
Colloquial name:	Turner River Pindan Sand

1.2. Description of clearing activities

Norwest Sand & Gravel Pty Ltd proposes to clear up to 25 hectares of native vegetation within a boundary of approximately 51.649 hectares, for the purpose of sand mining and associated activities. The project is located approximately 14 kilometres southwest of Port Hedland, within the Town of Port Hedland.

This permit will be replacing CPS 9283/1, which expired on 6 August 2026.

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	2 October 2026
Decision area:	25 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 7 days, and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (Appendix A), relevant datasets (Appendix D), the clearing principles set out in Schedule 5 of the EP Act (Appendix B), relevant planning instruments and any other matters considered relevant to the assessment (Section 3.3).

The assessment identified that the proposed clearing may result in:

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

After consideration of the available information, 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;

- no clearing of trees with a diameter, at 1.5 metres above the ground, of 500 millimetres or greater, and dripline vegetation of identified trees;
- commence sand mining and associated activities no later than three months after undertaking clearing to reduce the risk of erosion;
- vegetation management to avoid riparian vegetation and maintain existing water flow where practicable;
- A pre-clearance survey to be conducted by a botanist to confirm the identification of *Abutilon* sp. Pritzelianum (S. van Leeuwen 5095). Once confirmed, all individuals should be clearly flagged; and
- A minimum 10 metre exclusion zone should be established around each confirmed occurrence of *Abutilon* sp. Pritzelianum (S. van Leeuwen 5095), with the area fenced or otherwise marked to prevent disturbance.

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 is not likely to lead to an unacceptable risk to environmental values. However, in future amendments of this permit new flora and fauna surveys will be required to adequately assess the impact of clearing on environmental values.

2. Legislative context

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

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

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

Other legislation of relevance for this assessment include:

- Biodiversity Conservation Act 2016 (WA) (BC Act)
- Conservation and Land Management Act 1984 (WA) (CALM Act)
- Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act)
- Mining Act 1978 (WA)

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 Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia (EPA, 2004b)
- Technical guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (EPA, 2016)

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

No evidence of avoidance or mitigation measures was provided to support the application. Impacts to environmental values can continued to be managed under permit conditions.

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 may 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)

***Abutilon* sp. Pritzelianum (S. van Leeuwen 5095)**

Assessment

Abutilon sp. Pritzelianum (S. van Leeuwen 5095), a Priority three flora species, was recorded multiple times along the south-eastern boundary of the application area during the Biologic (2024b) flora survey. This species was not recorded during the previous survey conducted by West Ecology in 2011 (West Ecology, 2011). *Abutilon* sp. Pritzelianum (S. van Leeuwen 5095) is known to occur across a range of habitats within the Carnarvon, Murchison and Pilbara bioregions (Biologic, 2024b; WA Herbarium, 1998–). Across the broader Biologic (2024b) survey area (approximately 9,161 hectares), more than 1,200 individuals were recorded from 321 locations within and adjacent to the survey areas.

It is noted that *Abutilon* sp. Pritzelianum (S. van Leeuwen 5095) has been recorded along the southern boundary of the application area, within a section that has been heavily disturbed by previous activities. These records are located well outside the proposed mining footprint, with the approved Mining Closure and Mine Closure Plan (MC-MCP 88894) commencing approximately 40 metres north of the powerline. As such, any impacts resulting from the proposed clearing are expected to be minimal, particularly given the management measures and conditions outlined below and on the permit.

Conclusion

The Delegated Officer has reviewed the available information and notes that *Abutilon* sp. Pritzelianum (S. van Leeuwen 5095) has a broad distribution, is locally abundant, and occurs in a variety of habitats. In consideration of these factors, together with the conditions outlined below, any potential impacts to this species are expected to be low.

Condition

- A pre-clearance survey to be conducted by a botanist to confirm the identification of *Abutilon* sp. Pritzelianum (S. van Leeuwen 5095). Once confirmed, all individuals should be clearly flagged; and
- A minimum 10 metre exclusion zone should be established around each confirmed occurrence of *Abutilon* sp. Pritzelianum (S. van Leeuwen 5095), with the area fenced or otherwise marked to prevent disturbance.

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

No fauna surveys or habitat assessments have been conducted over the application area. A habitat assessment has been conducted over part of the application area by Biologic (2024a).

Brush-tailed mulgara

Dasyercus blythi, (brush-tailed mulgara) is a Priority 4 species that occurs in mature spinifex grasslands and adjacent vegetation associated with drainage systems, sandplains, and sand dunes (NESP, 2021). It is nocturnal, sheltering in burrows beneath grass clumps and shrubs during the day.

There are multiple records of the brush-tailed mulgara within a 50 kilometre radius of the application area (GIS Database). Although drainage and sandplain habitats within and adjacent to the application area are considered suitable habitat (Biologic, 2024a), the application area is predominantly composed of sparsely vegetated riverbed habitat with isolated shrubs and tussock grasses (Biologic, 2024a; West Ecology, 2011; GIS Database). Denser and higher-quality drainage and sandplain habitats occur adjacent to the application area, particularly to the east and south where most records of the species are located (GIS Database).

While this species may occasionally use the application area for foraging or dispersal; however, its low vegetation density and large amount of disturbed area indicates it is unlikely to represent critical habitat. As higher-quality habitat remains extensive in surrounding areas, the proposed clearing is unlikely to significantly impact the species.

Migratory shorebirds and seabirds

Migratory shorebirds typically arrive in northern Australia around September, disperse across the country, and return north from March (DCCEEW, 2025). The application area is approximately 18 kilometres inland and may provide foraging habitat for some species associated with coastal, estuarine, and inland waterways. However, similar habitat is widespread beyond the application area, with numerous watercourses present in the surrounding area. As a result, the proposed clearing is unlikely to significantly impact migratory shorebirds. Furthermore, preferred habitat for predominantly coastal species is largely absent from the application area.

Peregrine falcon

Falco peregrinus (peregrine falcon) (OS) is widespread across Australia and typically occurs in coastal and inland cliff habitats, as well as open woodlands near waterbodies and watercourses (Australian Museum, 2019). Drainage line habitat within the application area may provide suitable foraging habitat and potential nesting habitat in large trees. However, retaining all trees with a diameter of 500 millimetres or greater, measured at 1.5 metres above the ground, will minimise impacts to potential nesting habitat, making significant impacts to the peregrine falcon unlikely.

Grey falcon

Falco hypoleucos (grey falcon) (VU) occurs in low densities across arid and semi-arid inland Australia (Threatened Species Scientific Committee, 2020). This species frequents timbered lowland plains, acacia shrublands, tree-lined watercourses, open woodlands, treeless areas and tussock grasslands (Threatened Species Scientific Committee, 2020). Grey falcons nest in the tallest trees along watercourses particularly in River Red Gum (*Eucalyptus camaldulensis*) and Coolibah (*Eucalyptus coolabah*), or in old nests of other large birds (Threatened Species Scientific Committee, 2020).

The application area may contain suitable foraging habitat and suitable nesting habitat for this species. As a result, no trees with a diameter, measured at 1.5 metres above ground, of 500 millimetres or greater will be cleared.

Conclusion

The application area is predominantly located outside the riparian zone and consists largely of sparsely vegetated or previously disturbed areas. To further minimise impacts on riparian habitat, restricted clearing conditions are recommended, including the retention of large trees along the river and the avoidance of clearing vegetation within their drip lines.

While some conservation-significant fauna species may occur in the local area, suitable habitat within the application area is limited due to the sparse vegetation cover, and these species are unlikely to be specifically reliant on habitat within the proposed clearing area. The dominant vegetation association, *Open shrubland of Acacia coleii* var. *coleii* and *Acacia inaequilatera* over hummock grassland on plains, is locally widespread and extends for several kilometres along both banks of the river (CALM, 2002; West Ecology, 2011; GIS Database). Given the low habitat value of the vegetation to be cleared, the availability of extensive

similar habitat in the surrounding landscape, and the implementation of conditions set out on the permit, the proposed clearing is unlikely to result in significant impacts to local fauna habitat or fauna species.

Conditions

- avoid, minimise to reduce the impacts and extent of clearing; and
- no clearing of trees with a diameter, at 1.5 metres above the ground, of 500 millimetres or greater, and dripline of identified trees.

3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on 15 September 2026 by the Department of Mines, Petroleum and Exploration inviting submissions from the public. No submissions were received in relation to this application.

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

There are 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 Mining Development and Closure Proposal approved under the Mining Act 1978

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

End

Appendix A. Site characteristics

A.1. Site characteristics

Characteristic	Details								
Local context	The area proposed to be cleared is part of an expansive tract of native vegetation in the extensive land use zone of Western Australia. The site is located along the Turner River adjacent to the Great Northern Highway, approximately 14 kilometres southwest of Port Hedland (GIS Database). Native vegetation within 50 kilometres of the site is largely intact, with localised disturbance associated with Port Hedland, road and rail infrastructure, and mining activities. Regional land uses include grazing of native pastures, Aboriginal lands and reserves, conservation areas, mining leases, and urban development (CALM, 2002).								
Ecological linkage	According to available databases, the application area does not contain any known or mapped ecological linkages (GIS Database).								
Conservation areas	There are no conservation areas within the local surrounds (50 kilometres) (GIS Database). The nearest conservation area is Mungaroona Range Nature Reserve located approximately 93 kilometres southwest of the application area (GIS Database).								
Vegetation description	The vegetation of the application area is broadly mapped as the following Beard vegetation associations: 589: Mosaic: Short bunch grassland - savannah / grass plain (Pilbara) / Hummock grasslands, grass steppe; soft spinifex; and 619: Medium woodland; river gum (<i>Eucalyptus camaldulensis</i>) (GIS Database). A flora and vegetation survey conducted over most of the application area by Biologic during April, 2023 (Biologic, 2024b) mapped the following vegetation: <table border="1"> <thead> <tr> <th>Vegetation Code</th><th>Description</th></tr> </thead> <tbody> <tr> <td>SP Cz AiHl As Be TsTe</td><td><i>Corymbia zygomphylla</i> low isolated trees over <i>Acacia inaequilatera</i>, <i>Hakea lorea</i> subsp. <i>lorea</i> tall isolated shrubs over <i>Acacia stellaticeps</i> low-mid shrubland over <i>Bonamia erecta</i> low sparse shrubland over <i>Triodia schinzii</i>, <i>Triodia epactia</i> mid open hummock grassland.</td></tr> <tr> <td>SP As SpPaPt TeTs</td><td><i>Acacia stellaticeps</i> mid isolated shrubs over <i>Sida</i> sp. Pilbara (A.A. Mitchell PRP 1543), <i>Ptilotus astrolasius</i>, <i>Pluchea tetranthera</i> low isolated shrubs over <i>Triodia epactia</i>, <i>Triodia schinzii</i> low open hummock grassland.</td></tr> <tr> <td>cleared</td><td></td></tr> </tbody> </table>	Vegetation Code	Description	SP Cz AiHl As Be TsTe	<i>Corymbia zygomphylla</i> low isolated trees over <i>Acacia inaequilatera</i> , <i>Hakea lorea</i> subsp. <i>lorea</i> tall isolated shrubs over <i>Acacia stellaticeps</i> low-mid shrubland over <i>Bonamia erecta</i> low sparse shrubland over <i>Triodia schinzii</i> , <i>Triodia epactia</i> mid open hummock grassland.	SP As SpPaPt TeTs	<i>Acacia stellaticeps</i> mid isolated shrubs over <i>Sida</i> sp. Pilbara (A.A. Mitchell PRP 1543), <i>Ptilotus astrolasius</i> , <i>Pluchea tetranthera</i> low isolated shrubs over <i>Triodia epactia</i> , <i>Triodia schinzii</i> low open hummock grassland.	cleared	
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cleared									
Vegetation condition	Vegetation surveys of the application area found the vegetation to be in completely degraded to very good condition (Trudgen, 1991).								
Climate and landform	The climate of the Roebourne subregion is described as arid (semi-desert) tropical with highly variable rainfall, falling mainly in summer (CALM, 2002). Cyclonic activity is significant, with several systems affecting the coast and hinterland annually (CALM, 2002). The average rainfall is approximately 315.4 millimetres per year, recorded at Port Hedland Airport (BoM, 2026; CALM, 2002). The application area is mapped at elevations of 10-30 metres Australian Height Datum (GIS Database).								
Soil description	The soil is mapped as a part of the following land system (DPIRD, 2026; Van Vreeswyk et al., 2004; GIS Database): River system: Narrow, seasonally active flood plains and major river channels supporting moderately close, tall shrublands or woodlands of acacias and fringing communities of eucalypts sometimes with tussock grasses or spinifex. This system is highly or very highly susceptible to erosion when vegetation cover is removed. Mallina system: Sandy surfaced alluvial plains supporting soft spinifex grasslands and minor hard spinifex and tussock grasslands.								
Land degradation risk	The River land system is highly susceptible to erosion if vegetation cover is removed (Van Vreeswyk et al., 2004). Mallina land systems' alluvial plains are moderately to highly susceptible to erosion if vegetative cover is seriously depleted (Van Vreeswyk et al., 2004).								
Waterbodies	The desktop assessment and aerial imagery indicate that the application area is located adjacent to the Turner River, a major ephemeral watercourse (GIS Database). The nearest Wetland of National Importance is Leslie (Port Hedland) Saltfields System which is located approximately 33 kilometres northeast of the application area (GIS Database).								

Characteristic	Details
Hydrogeography	The nearest Public Drinking Water Source Area is Yule River Water Reserve located approximately 18 kilometres west of the application area (GIS Database). The application area is located within the Pilbara Ground Water Area and Pilbara Surface Water Area proclaimed under the <i>Rights in Water and Irrigation Act 1914</i> (GIS Database). The groundwater salinity is mapped as 1,000 to 3,000 milligrams per litre total dissolved solids which is described as brackish (BoM, 2019; GIS Database).
Flora	There are no known records of Threatened flora within the application area (GIS Database). There is one Priority three flora species that has been recorded on the southeastern boundary of the application area (Biologic, 2024b). West Ecology (2011) recorded seven weed species within the application area; however, none of these species are listed as Weeds of National Significance (WoNS).
Ecological communities	There are no Priority Ecological Communities or Threatened Ecological Communities within the application area (GIS Database). Within the local surrounds (50 kilometres) there are multiple records of the Gregory Land System Priority Ecological Community (GIS Database). There are no Threatened Ecological Communities within a 50 kilometre radius of the application area (GIS Database).
Fauna	There are multiple records of fauna of conservation significance that have been recorded within a 50 kilometre radius (GIS Database). There have been no records of conservation significant fauna recorded within the application area (Biologic, 2024a; GIS Database).

A.2. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (Appendix B.1), and biological survey information (Biologic, 2024b), impacts to the following conservation significant flora required further consideration.

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Are surveys adequate to identify? [Y, N, N/A]
<i>Abutilon</i> sp. Pritzelianum (S. van Leeuwen 5095)	P3	Y	Y	Y	0	Y

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

A.1. Fauna analysis table

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

Species name	Conservation status	Suitable habitat features? [Y/N]	Distance of closest record to application area (km)
Barn swallow (<i>Hirundo rustica</i>)	MI	Y	<15
Bar-tailed godwit (<i>Limosa lapponica</i>)	MI	Y	<5
Bar-tailed godwit (northern Siberian) (<i>Limosa lapponica menzbieri</i>)	CR	Y	<30
Black-tailed godwit (<i>Limosa limosa</i>)	MI	Y	<30
Broad-billed sandpiper (<i>Calidris falcinellus</i>)	MI	Y	<30
Caspian tern (<i>Hydroprogne caspia</i>)	MI	Y	<5
Common greenshank (<i>Tringa nebularia</i>)	MI	Y	<5
Common sandpiper (<i>Actitis hypoleucos</i>)	MI	Y	<5
Common tern (<i>Sterna hirundo</i>)	MI	Y	<25
Curlew sandpiper (<i>Calidris ferruginea</i>)	CR	Y	<15
Eastern curlew (<i>Numenius madagascariensis</i>)	CR	Y	<5
Fairy tern (<i>Sternula nereis nereis</i>)	VU	Y	<25
Fork-tailed swift (<i>Apus pacificus</i>)	MI	Y	<35
Glossy ibis (<i>Plegadis falcinellus</i>)	MI	Y	<30
Great knot (<i>Calidris tenuirostris</i>)	CR	Y	<5

Species name	Conservation status	Suitable habitat features? [Y/N]	Distance of closest record to application area (km)
Greater sand plover (<i>Charadrius leschenaultii</i>)	VU	Y	<5
Grey falcon (<i>Falco hypoleucos</i>)	VU	Y	<5
Grey plover (<i>Pluvialis squatarola</i>)	MI	Y	<5
Gull-billed tern (<i>Gelochelidon nilotica</i>)	MI	Y	<5
Lesser sand plover (<i>Charadrius mongolus</i>)	EN	Y	<5
Little curlew (<i>Numenius minutus</i>)	MI	Y	<5
Little tern (<i>Sternula albifrons</i>)	MI	Y	<25
Long-toed stint (<i>Calidris subminuta</i>)	MI	Y	<5
Marsh sandpiper (<i>Tringa stagnatilis</i>)	MI	Y	<25
Oriental plover (<i>Charadrius veredus</i>)	MI	Y	<25
Oriental pratincole (<i>Glareola maldivarum</i>)	MI	Y	<5
Osprey (<i>Pandion haliaetus</i>)	MI	Y	<5
Pacific golden plover (<i>Pluvialis fulva</i>)	MI	Y	<15
Pectoral sandpiper (<i>Calidris melanotos</i>)	MI	Y	<25
Peregrine falcon (<i>Falco peregrinus</i>)	OS	Y	<5
Pin-tailed snipe (<i>Gallinago stenura</i>)	MI	Y	<20
Red knot (<i>Calidris canutus</i>)	EN	Y	<5
Red-necked phalarope (<i>Phalaropus lobatus</i>)	MI	Y	<45
Red-necked stint (<i>Calidris ruficollis</i>)	MI	Y	<5
Ruff (<i>Calidris pugnax</i>)	MI	Y	<5
Sanderling (<i>Calidris alba</i>)	MI	Y	<5
Sharp-tailed sandpiper (<i>Calidris acuminata</i>)	MI	Y	<5
Terek sandpiper (<i>Xenus cinereus</i>)	MI	Y	<5
Whimbrel (<i>Numenius phaeopus</i>)	MI	Y	<5
White-winged black tern (<i>Chlidonias leucopterus</i>)	MI	Y	<15
Wood sandpiper (<i>Tringa glareola</i>)	MI	Y	<5
Mammals			
Brush-tailed mulgara (<i>Dasycercus blythi</i>)	P4	Y	<5

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, 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 records of a Priority three flora species (Biologic, 2024b).	May be at variance	Yes See section 3.2.1
<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>	May be at variance	Yes See section 3.2.2

Assessment against the clearing principles	Variance level	Is further consideration required?
The area proposed to be cleared may contain significant foraging, roosting, or breeding habitat for conservation significant fauna.		
<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> The area proposed to be cleared is unlikely to contain habitat for flora species listed under the BC Act 2016.	Not likely to be at variance	No
<u>Principle (d):</u> <i>"Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community."</i> <u>Assessment:</u> There are no known Threatened Ecological Communities (TECs) located within or in close proximity to the application area (Western Ecology, 2011; 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 mapped vegetation type retains greater than 99% of its pre-European extent (Government of Western Australia, 2019). Consequently, the vegetation association remains widespread within the landscape and is consistent with national objectives and targets for biodiversity conservation in Australia.	Not at variance	No
<u>Principle (h):</u> <i>"Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area."</i> <u>Assessment:</u> Given the distance to the nearest conservation area, the proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas (GIS Database).	Not likely to be at variance	No
Environmental value: land and water resources		
<u>Principle (f):</u> <i>"Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."</i> <u>Assessment:</u> The application area consists of sparsely vegetated, previously disturbed land located adjacent to, but outside, the Turner River riparian zone, avoiding more densely vegetated areas (West Ecology, 2011; GIS Database). A small section of riparian vegetation was previously cleared to provide access to the sand mining area under CPS 6284/3 (now expired) and has been retained within the application area. Given its limited extent and previous disturbance, the proposed clearing is unlikely to affect the conservation of this riparian vegetation. However, based on the above, the proposed clearing is at variance with Principle (f). Potential impacts to vegetation growing in association with the watercourse may be minimised by the implementation of a watercourse management condition and a restricted clearing condition to protect larger trees.	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 application area lies within the River and Mallina land systems (GIS Database). The River land system is highly susceptible to erosion if vegetation cover is removed and alluvial plains within the Mallina land system are moderately to highly susceptible to erosion if vegetative cover is seriously depleted (Van Vreeswyk et al., 2004). The application area is comprised of sparsely vegetated and previously disturbed areas (West Ecology, 2011; GIS Database), and it is unlikely that removal of vegetation will significantly increase land degradation, however potential impacts to the application	May be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
area may be minimised by the implementation of a staged clearing condition. Based on the above, the proposed clearing may be at variance to this principle.		
Principle (i): <i>"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water."</i> <u>Assessment:</u> The application area is not located within, or near, any Public Drinking Water Source Areas (GIS Database), however it sits adjacent to the Turner River, a major seasonal watercourse (GIS Database; CALM, 2002). Most established riverbed vegetation has been excluded from the application area, minimising the potential for soil instability and erosion within the watercourse. As a result, the proposed clearing is unlikely to cause significant impacts to water quality or alter surface water flows. Groundwater in the area has a salinity of 1,000 to 3,000 milligrams per Litre of Total Dissolved Solids (TDS), which is classified as brackish (GIS Database). The proposed clearing is not likely to cause deterioration of groundwater within the application area.	Not likely to be at variance	No
Principle (j): <i>"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."</i> <u>Assessment:</u> The application area is located adjacent to the Turner River, which is a large watercourse that flows during periods of heavy rainfall (CALM, 2002; GIS Database). The Turner River may experience periodic inundation and adjacent areas may be subjected to occasional flooding. However, the proposed clearing is limited to small areas of sparsely vegetated riverbed and is unlikely to increase the frequency or severity of flooding events.	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. Sources of information

D.1. GIS datasets

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

- 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)
- IBRA Vegetation Statistics
- IBSA Survey Details (DWER-118)
- Local Government Area (LGA) Boundaries (LGATE-233)
- Localities (LGATE-234)
- Mineral Field Boundaries (DMIRS-005)
- Native Title (Determination) (LGATE-066)
- Native Title (Fed Court) (LGATE-005)
- Native Title (NNTT) (LGATE-004)
- Native Vegetation Extent (DPIRD-005)
- Pre-European Vegetation (DPIRD-006)
- Public Drinking Water Source Areas (DWER-033)
- Regional Parks (DBCA-026)
- Reserves (LGATE-227)
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Rivers (DWER-036)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Mapping - Best Available (DPIRD-027)
- Surface Water Management Areas (DWER-041)
- Townsites (LGATE-248)
- WA Now Aerial Imagery
- Waterways Conservation Act Management Areas (DWER-072)
- Wild Rivers (DWER-087)
- WRIMS - Groundwater Areas (DWER-085)
- WRIMS - Groundwater Resources (DWER-084)
- WRIMS - Surface Water Areas (DWER-082)
- WRIMS - Surface Water Resources (DWER-081)

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)

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)

D.2. References

Australian Museum (2019) Peregrine Falcon. Australian Museum, New South Wales. Available from:

<https://australian.museum/learn/animals/birds/peregrine-falcon/>

Biologic Environmental Survey Pty Ltd (2024a) Port Hedland Transmission Line Basic and Targeted Vertebrate Fauna Survey. Prepared for Pilbara Energy, June 2024 (IBSA-2024-0283).

Biologic Environmental Survey Pty Ltd (2024b) Port Hedland Transmission Line Flora and Vegetation Survey. Prepared for Pilbara Energy, June 2024 (IBSA-2024-0282).

- Bureau of Meteorology (BoM) (2026) Bureau of Meteorology Website – Climate Data Online, Port Hedland Airport (004032). Bureau of Meteorology. <https://reg.bom.gov.au/climate/data/> (Accessed 7 July 2026).
- Conservation and Land Management (CALM) (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- Department of Climate Change, Energy, the Environment and Water (DCCEEW) (2025) *Wetlands and migratory shorebirds*. Australia Government Department of Climate Change, Energy, the Environment and Water. <https://www.dcceew.gov.au/water/wetlands/about/migratory-shorebirds>. Accessed 10 August 2026.
- Department of Environment Regulation (DER) (2014) *A guide to the assessment of applications to clear native vegetation*. Perth. https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf
- Department of Planning, Lands and Heritage (DPLH) (2026) Aboriginal Cultural Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://espatial.dplh.wa.gov.au/ACHIS/index.html?viewer=ACHIS> (Accessed 6 July 2026).
- Department of Primary Industries and Regional Development (DPIRD) (2026) NRInfo Digital Mapping. Department of Primary Industries and Regional Development. Government of Western Australia. <https://dpiird.maps.arcgis.com/apps/webappviewer/index.html?id=662e8cbf2def492381fc915aaf3c6a0f> (Accessed 7 July 2026).
- Department of Water and Environmental Regulation (DWER) (2021) Procedure: Native vegetation clearing permits. Joondalup. <https://www.wa.gov.au/system/files/2024-11/procedure-native-vegetation-clearing-permits.pdf>
- Environmental Protection Authority (EPA) (2004) Guidance for the Assessment of Environmental Factors - Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia, No. 51, June 2004.
- Environmental Protection Authority (EPA) (2016) Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment. http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey_Dec13.pdf
- National Environmental Science Programme Threatened Species Recovery Hub (NESP) (2021) Arid Zone Monitoring Species Profile: Brush-tailed mulgara, Project 3.2.5 findings factsheet. Available from: file:///internal.dom/corp/ENV/Native%20Vegetation/References/Fauna/mammals/Mulgara/azm_species-profile_brush-tailed-mulgara_v4.pdf
- Threatened Species Scientific Committee (2020) *Falco hypoleucos* Grey Falcon Conservation Advice. Available from: <https://environment.gov.au/biodiversity/threatened/species/pubs/929-conservation-advice-09072020.pdf>
- 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.
- Van Vreeswyk, A.M.E., Payne, A.L., Leighton, K.A. and Hennig, P. (2004) An inventory and condition survey of the Pilbara Region, Western Australia. Technical Bulletin No. 92. Department of Agriculture, South Perth, Western Australia.
- Western Australian Herbarium (WA Herbarium) (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions, Western Australia. <https://florabase.dpaw.wa.gov.au/> (Accessed 6 July 2026).
- Western Ecology (2011) Flora and Vegetation Survey of Welcome Exploration Tenements M47/411, M47/524, M47/556, M47/442 and M45/1195. Prepared for Welcome Exploration Pty Ltd by West Ecology, September 2011.

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:

DBCAs (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.