Government of Western Australia
Department of Mines, Industry Regulation and Safety

Clearing Permit Decision Report

1. Application details and outcomes

1.1. Permit application details

Permit number:	8278/2
Permit type:	Purpose Permit
Applicant name:	AGI Development Group Nominees Pty Limited
Application received:	3 May 2023
Application area:	227 hectares
Purpose of clearing:	Pipeline maintenance and associated activities
Method of clearing:	Mechanical Removal
Tenure:	Petroleum Pipeline Licence 16 Petroleum Pipeline Licence 19 Petroleum Pipeline Licence 20 Petroleum Pipeline Licence 103 Petroleum Pipeline Licence 112 Production Licence 9
Location (LGA area/s):	Shire of Ashburton
Colloquial name:	Ashburton West Pipelines

1.2. Description of clearing activities

AGI Development Group Nominees Pty Limited proposes to clear up to 227 hectares of native vegetation within a boundary of approximately 525 hectares, for the purpose of Pipeline maintenance and associated activities. The project is located approximately 13 kilometres south-west of Onslow and runs in a general south-easterly direction for approximately 110 kilometres within the Shire of Ashburton.

Clearing permit CPS 8278/1 was granted by the Department of Mines, Industry Regulation and Safety on 29 August 2019 and was valid from 1 September 2019 to 20 September 2024. The permit authorised the clearing of up to 227 hectares of native vegetation, within a boundary of approximately 527 hectares, for the purpose of pipeline maintenance and associated activities.

On 3 May 2023, the Permit Holder applied to amend CPS 8278/1 to extend the permit duration to 20 September 2029 and update the Permit Holder name to AGI Development Group Nominees Pty Limited. The size of the area approved to clear and the permit boundary remains the same.

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	19 September 2023
Decision area:	277 hectares of native vegetation

1.4. Reasons for decision

This clearing permit application was made in accordance with section 51KA(1) of the *Environmental Protection Act 1986* (EP Act) and was received by the Department of Mines, Industry Regulation and Safety (DMIRS) on 3 May 2023. DMIRS advertised the application for a public comment for a period of 7 days, and one submission was received.

In making this decision, the Delegated Officer had regard for the site characteristics (Appendix B.1), relevant datasets (Appendix E), the clearing principles set out in Schedule 5 of the EP Act (Appendix C), proposed avoidance and minimisation measures (Section 3.1), 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; and
- the loss of riparian vegetation.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined the proposed clearing can be minimised and managed to be unlikely to lead to an unacceptable risk to environmental values.
The conditions currently imposed on clearing permit CPS 8278/2 are considered adequate to manage the impacts of clearing:

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

The assessment has not changed since the assessment for CPS 8278/1. The Delegated Officer determined that the proposed amendment CPS 8278/2 to extend permit duration by five years is not likely to lead to an unacceptable risk to 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 (see 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)
- *Country Areas Water Supply Act 1947* (WA) (CAWS Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *The Petroleum Pipelines Act 1969* (WA)

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) (Delete if flora surveys not included)
- Technical guidance – *Terrestrial Fauna Surveys for Environmental Impact Assessment* (EPA, 2016) (Delete if fauna surveys not included)
- Technical guidance – *Terrestrial Fauna Surveys for Environmental Impact Assessment* (EPA, 2020) (Delete if fauna surveys not included)

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

As demonstration of avoidance and mitigation measures, the applicant has advised clearing will be limited to areas previously cleared of native vegetation for maintenance purposes ensuring safe operations in relation to the pipeline.

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

A review of current environmental information (Appendix B) reveals that the assessment against the clearing principles has posed no changes from the Clearing Permit Decision Report CPS 8278/1.

In assessing the application, the Delegated Officer has had regard for the site characteristics (Appendix B.1) 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 environmental values (riparian vegetation). 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 (fauna habitat) – Clearing principle (b)

Assessment

A Level 1 fauna survey was conducted by Ninox Wildlife Consulting (Ninox) in April 2013. The fauna survey covered a similar area to the flora survey which also includes areas that are outside the application area. The following 13 habitats were identified within the larger fauna survey area (Ninox, 2013):

1. Tidal mudflats/creeks and mangroves
2. Seasonally inundated inland wetlands
3. Chenopod shrublands
4. Acacia over spinifex and buffel on sand
5. Acacia over spinifex on clay
6. Acacia over grasses on clay
7. Grasslands on clay
8. Shrubs over spinifex on sand
9. Eucalypts and shrubs over grasses on clay
10. Eucalypts and shrubs over spinifex and buffel on clay
11. Eucalypts over shrubs and grasses on clay
12. Riparian zones on clay
13. Riparian zones on sandy clay

The majority of fauna habitats recorded are widespread in the local area, however, mangrove habitat was identified as having particular importance (Ninox, 2013). This habitat is significant as it is the only closed canopy forest in the area and supports a range of species not found elsewhere (Ninox, 2013). The areas of mangroves recorded during the vegetation survey are located outside the application area (Mattiske, 2013). There are areas of fauna habitat type 1 within the application area, however, they are predominantly associated with tidal mud flats. Whilst they don't provide the shelter of the mangroves, the tidal mud flats are utilised by a number of shore, wading and migratory birds (Ninox, 2013). As this area was previously cleared, the proposed clearing for pipeline maintenance is not likely to have a significant impact on this habitat.

A higher level of bird species were recorded in riverine habitat, in particular where the application area crosses the Ashburton River as there were still pools of fresh water present (Ninox, 2013). Whilst this habitat is important for local fauna, it has suffered significant degradation from cattle grazing and soil disturbance (Ninox, 2013). Habitat features such as termite mounds are important for a number of vertebrates, and cracking clays are used for shelter in the dry months for a range of species including planigales and dunnarts (Ninox, 2013). These habitat features were not restricted to a specific habitat type.

There have been numerous fauna species of conservation significance recorded within or nearby to the application area, in particular bird species (Ninox, 2013). The application area also contains habitat with the potential to support a number of conservation significant species that have not been recorded. Whilst the proposed clearing will intersect habitat for conservation significant fauna, the disturbance in each habitat is relatively minor as it will be in a narrow corridor over a large distance and only occur or previously cleared areas. Given the nature of the disturbance and the representation of the habitats outside the application area, the proposed clearing is not likely to significantly impact native fauna species.

Conclusion

Based on the above assessment, the area proposed to be cleared is unlikely to cause additional impacts to fauna habitats for conservation significant species. Potential impacts to fauna habitat as a result of the proposed clearing may be minimised by the continuous implementation of the avoid and minimise condition.

Conditions

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

- Avoid, minimise to reduce the impacts and extent of clearing

3.3. Relevant planning instruments and other matters

The clearing permit amendment application was advertised on 9 June 2023 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. One submission was received in relation to this application (Appendix A).

There is one native title claim (WCD2008/003) over the area under application (DPLH, 2023). This claim has been determined by the Federal Court on behalf of the claimant group. However, the pipeline and production 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 two registered Aboriginal Sites of Significance within the application area (DPLH, 20233). It is the proponent's responsibility to comply with the *Aboriginal Cultural Heritage Act 2021* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

Other relevant authorisations required for the proposed land use include:

- *Petroleum Pipelines Act 1969*.

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. Details of public submissions

The clearing permit amendment application was advertised on 9 June 2023 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. One submission was received in relation to this application.

Summary of comments	Consideration of comment
Querying the purpose of the proposed clearing.	Clearing will be limited to pipeline maintenance and associated activities, the majority of which will be undertaken on previously disturbed land.
Requesting sufficient biological surveys of the application area.	The permit holder has provided sufficient information in helping the Department undertake an environmental impact assessment.
Required offsets for the production of greenhouse gas and carbon dioxide.	This is beyond the scope of this assessment.

Appendix B. Site characteristics

B.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. It is surrounded by native vegetation and landscape of the Canarvon bioregion and extends from the Western Australian coast located approximately 13 kilometres south-west of Onslow and runs in a general south-easterly direction for approximately 110 kilometres within the Shire of Ashburton (GIS Database).
Ecological linkage	The application area does not form part of any formal or informal ecological linkages (GIS Database).
Conservation areas	The closest conservation area is the Cane River Conservation Park located approximately 16 kilometres east of the application area (GIS Database).
Vegetation description	The vegetation of the application area is broadly mapped as the following Beard vegetation associations: 117: Grass-steppe; 127: Tidal mud flat; 589: Short bunch-grass savanna/Grass-steppe; 608: Scrub or very open scrub/Grass-steppe; 676: Samphire; and 1271: Salt lake, lagoon, clay pan (GIS Database). A Level 1 flora and vegetation survey of the pipeline project area was undertaken by Mattiske Consulting Pty Ltd (Mattiske) in April 2013. The survey area covered a wider corridor than the application area and also covered an area north of the application area that is not part of the current application. There is an approximate five kilometre section of the permit area which was not covered by the flora survey. The flora and vegetation survey identified a total of 30 different vegetation communities (Mattiske, 2013): Tidal Mudflats and Tidal Creeks - T1: *Tecticornia* spp. low scattered shrubs; - T2: *Avicennia marina* mid open scrubland; Claypans and Clayey Plains - C1: Bare Claypan; - C2: *Tecticornia* spp. low sparse chenopod shrubland with *Sporobolus mitchellii*, *Eriachne helmsii* low isolated tussock grasses; - C3: *Acacia tetragonophylla*, *Acacia synchronicia*, **Vachellia farnesiana* mid isolated shrubs over *Urochloa occidentalis* var. *occidentalis*, *Chrysopogon fallax*, *Sporobolus* mitchellii, *Cenchrus ciliaris low open tussock grasses; - C4: *Tecticornia* spp. low shrubland; Coastal Sand Dunes - CD1: *Acacia coriacea* subsp. *coriacea* tall shrubland over *Crotalaria cunninghamii*, *Trichodesma zeylanicum* var. *grandiflorum* mid open shrubland over *Triodia epactia* mid open hummock grassland with **Cenchrus ciliaris* low open tussock grassland; Coastal Sand and Clayey Plains

Characteristic	Details
	- CP1: *Eucalyptus victrix* low open woodland over *Acacia tetragonophylla*, *Acacia sclerosperma* subsp. *sclerosperma*, *Scaevola spinescens* tall sparse shrubland over *Triodia epactia* mid open hummock grassland with *Sporobolus mitchellii*, *Chrysopogon fallax*, **Cenchrus ciliaris* low sparse tussock grassland; - CP2: *Eucalyptus victrix* low open woodland over *Abutilon oxycarpum*, *Ipomoea muelleri*, *Panicum decompositum* mid sparse forbland over *Enteropogon ramosus*, *Eriachne helmsii*, *Sporobolus mitchellii* low open tussock grassland; - CP3: *Acacia tetragonophylla* low scattered shrubs over *Triodia epactia* low hummock grassland with **Cenchrus ciliaris* low open tussock grassland; - CP4: **Prosopis pallida*, *Acacia tetragonophylla*, *Acacia synchronicia* tall scattered shrubs over *Triodia epactia* mid sparse hummock grassland with **Cenchrus ciliaris* low open tussock grassland; - CP5: *Sporobolus mitchellii*, *Eriachne aff. benthamii*, *Eriachne benthamii*, *Eulalia aurea* mid tussock grassland; Inland Sand Dunes - ID1: *Grevillea stenobotrya* low sparse shrubland over *Acacia stellaticeps* mid open shrubland over *Triodia epactia* hummock grassland; - ID2: *Acacia stellaticeps*, *Acacia sclerosperma* subsp. *sclerosperma* mid sparse shrubland with *Bonamia erecta*, *Hibiscus brachychlaenus*, *Scaevola sericophylla* low sparse shrubland over *Triodia epactia* mid hummock grassland with **Cenchrus ciliaris*, *Eragrostis eriopoda* low sparse tussock grassland; - ID3: *Grevillea stenobotrya* tall open shrubland over *Crotalaria cunninghamii*, *Trichodesma zeylanicum* var. *grandiflorum* mid open shrubland over *Triodia epactia* mid open hummock grassland; Inland Sand and Clayey Plains - IP1: *Eucalyptus victrix* low scattered trees over *Acacia synchronicia*, *Acacia xiphophylla*, *Acacia sclerosperma* subsp. *sclerosperma* tall open shrubland over *Triodia lanigera* mid hummock grassland with **Cenchrus ciliaris* low sparse tussock grassland; - IP2: *Eucalyptus victrix* low isolated trees over *Acacia synchronicia*, *Acacia tetragonophylla*, *Acacia xiphophylla* tall sparse shrubland with *Senna artemisioides* subsp. *oligophylla*, *Scaevola spinescens* low sparse shrubland over *Triodia epactia* mid hummock grassland with *Eriachne helmsii*, **Cenchrus ciliaris* low open tussock grassland; - IP3: *Eucalyptus victrix*, *Grevillea striata* low isolated trees over *Hakea chordophylla*, *Acacia sclerosperma* subsp. *sclerosperma*, *Acacia trachycarpa* tall open shrubland with *Acacia synchronicia*, *Acacia tetragonophylla* low sparse shrubland over *Triodia epactia* mid isolated hummock grasses with **Cenchrus ciliaris* low sparse tussock grassland; - IP4: *Acacia xiphophylla*, *Acacia synchronicia* low open shrubland over *Senna artemisioides* subsp. *oligophylla*, *Solanum lasiophyllum* low sparse shrubland over *Eragrostis xerophila*, **Cenchrus ciliaris* low sparse tussock grassland; - IP5: *Acacia synchronicia*, *Acacia tetragonophylla*, *Acacia sclerosperma* subsp. *sclerosperma* low sparse shrubland over *Chrysopogon fallax*, *Eriachne helmsii*, *Urochloa occidentalis* var. *occidentalis* low open tussock grassland; - IP6: *Acacia synchronicia*, *Acacia sclerosperma* subsp. *sclerosperma*, *Acacia xiphophylla* low sparse shrubland over *Eragrostis eriopoda*, *Eriachne aristidea*, **Cenchrus ciliaris* low open tussock grassland; - IP7: *Eucalyptus victrix* low open woodland over *Acacia tetragonophylla*, *Acacia synchronicia*, *Cullen leucanthum* mid sparse shrubland over *Eriachne helmsii*, *Eulalia aurea*, **Cenchrus ciliaris* low sparse tussock grassland; - IP8: *Eucalyptus victrix* low isolated trees over *Acacia tetragonophylla*, *Acacia synchronicia* tall isolated shrubs with *Acacia stellaticeps*, *Acacia coriacea* subsp. *coriacea*, *Senna artemisioides* subsp. *oligophylla* low sparse shrubland over *Triodia epactia* mid hummock grassland with *Eulalia aurea*, *Eragrostis eriopoda*, **Cenchrus ciliaris* low sparse tussock grassland; Inland Floodplains and Depressions: - IF1: *Eucalyptus victrix* low open woodland over *Acacia synchronicia*, *Acacia tetragonophylla*, *Scaevola spinescens* tall sparse shrubland with *Rhynchosia minima*, *Senna artemisioides* subsp. *oligophylla*, *Eremophila longifolia* mid sparse shrubland over *Triodia epactia* low isolated hummock grasses with *Eriachne helmsii*, *Chrysopogon fallax*, *Urochloa occidentalis* var. *occidentalis* low sparse tussock grassland; - IF2: *Acacia xiphophylla*, *Acacia synchronicia* mid open shrubland over *Salsola australis*, *Rhagodia eremaea*, *Maireana* spp. mid sparse chenopod shrubland over *Eriachne benthamii*, *Sporobolus australasicus*, **Cenchrus ciliaris* low open tussock grassland; - IF3: *Acacia synchronicia*, *Acacia xiphophylla*, *Acacia trachycarpa* low sparse shrubland over *Salsola australis*, *Threlkeldia diffusa*, *Rhagodia eremaea* mid sparse chenopod shrubland with *Chrysopogon fallax*, *Enteropogon ramosus*, **Cenchrus ciliaris* low open tussock grassland;

Characteristic	Details
	- IF4: *Eucalyptus victrix* low open woodland over *Acacia synchronicia*, *Acacia tetragonophylla*, *Scaevola spinescens* tall sparse shrubland over *Sporobolus mitchellii*, *Eriachne helmsii*, *Eulalia aurea* low open tussock grassland; - IF5: *Eucalyptus victrix* low open woodland over *Acacia synchronicia*, *Acacia tetragonophylla*, *Senna artemisioides* subsp. *oligophylla* mid sparse shrubland over *Panicum decompositum*, *Rhynchosia minima*, *Neptunia dimorphantha* mid sparse forbland with *Eriachne helmsii*, *Eragrostis xerophila*, *Iseilema membranaceum* low open tussock grassland; River Zones and Drainage Channels - R1: *Eucalyptus victrix*, **Parkinsonia aculeata* low woodland over *Acacia tetragonophylla*, *Acacia coriacea* subsp. *coriacea* tall open shrubland over *Eulalia aurea*, *Leptochloa digitata* low tussock grassland; - R2: *Eucalyptus victrix*, *Eucalyptus camaldulensis* low woodland over *Scaevola spinescens*, *Acacia coriacea* subsp. *coriacea*, *Melaleuca glomerata* mid sparse shrubland over *Ipomoea muelleri*, *Euphorbia boophthona*, **Portulaca oleracea* low sparse forbland with **Cenchrus ciliaris* low sparse tussock grassland. *denotes weed species.
Vegetation condition	The vegetation survey conducted by Mattiske (2013) indicate the vegetation within the proposed clearing area is in pristine to completely degraded (Keighery, 1994) condition. The full Keighery (1994) condition rating scale is provided in Appendix D.
Climate and landform	The application area is located in the Cape Range subregion of the Carnarvon bioregion described as sub-tropical to semi-desert (Mattiske, 2013) with an annual average rainfall of 305.8 millimetres (Onslow Airport) (BoM, 2023). The surveyed application area is characterised by extensive sandy plains with north-west or north trending longitudinal dunes, broad claypans and circular grassy depressions (Mattiske, 2013).
Soil description	The soils within the application area are mapped as soil units Oc58, MM20 and SV8 (GIS Database). These soil units are described as: • Oc58: Broad alluvial plains with a few clay pans and red sand dunes; some areas of cracking clays along creek lines; • MM20: Narrow alluvial plains with gilgai microrelief flanking the rivers; and • SV8: Salt flats, tidal swamps, and coastal dune sands (Northcote et al., 1960-68).
Land degradation risk	The application area has been mapped as occurring on the Cheetara, Dune, Globe, Littoral, Minderoo, Nanyarra, Onslow and Yankagee land systems (GIS Database). • Cheetara land system: Alluvial clay plains with gilgais, mixed open tussock grasslands and tall shrublands; • Dune land system: Dune fields with soft spinifex and minor hard spinifex grasslands in coastal areas only; • Globe land system: Degraded alluvial plains supporting snakewood shrublands and minor tussock grasslands; • Littoral land system: Extensive bare coastal mudflats flanked by mangroves and narrow sandy plains; • Minderoo land system: Alluvial plains supporting tall shrublands and tussock grasslands and sandy plains supporting hummock grasslands; • Nanyarra land system: Alluvial plains with dense perennial grass pastures, beneath an overstorey of bardie bush and coolabah; • Onslow land system: Sand plain, dunes and clay plains with soft spinifex and tussock grasses; and • Yankagee land system: Plains with dunes and numerous claypans, soft spinifex and snakewood shrublands in the west of the area (Payne et al., 1988).
Waterbodies	The desktop assessment and aerial imagery indicated one major non perennial river (Ashburton River) intersecting the southern extent of the application (GIS Database). Furthermore, multiple minor non perennial lakes are located throughout the application area and the northern extent of the application area is largely intersected by saline coastal flats (GIS Database). The nearest wetland is the Exmouth Gulf East located approximately nine kilometres west of the application area and is listed in the Directory of Important Wetlands in Australia (GIS Database).
Hydrogeography	The application area falls within the Pilbara Groundwater area which is legislated by the RIWI Act 1914. Furthermore, the Cane River Water Reserve (P1) Public Drinking Water Source Area containing two Wellhead Protection Zones is located approximately 37 kilometres east of the application area (GIS Database).

Characteristic	Details
	The mapped salinity within the application area varies from 1,000 to 14,000 milligrams per litre total dissolved solids which is described as brackish to saline water quality with salinity levels increasing as the application area travels towards the coastline (GIS Database).
Flora	The flora survey undertaken by Mattiske (2013) identified a total of 139 plant species of which two were of significant conservation. Based on suitable habitat and historical records, a total of five conservation significant flora species could potentially occur within the application area (GIS Database) (Appendix B.3).
Ecological communities	There are no mapped Threatened or Priority Ecological Communities (TEC/PEC) within a 50 kilometre radius of the application area (GIS Database). The nearest ecological community is the Priority 1 Tanpool Land System located approximately 65 kilometres east of the application area (GIS Database).
Fauna	The fauna assessment conducted by Ninox (2013) identified a total of 69 fauna species (54 birds, 12 reptiles and three mammals), none of which were of conservation significance. Based on surrounding ecology and historical records, 19 conservation significant fauna species could potentially occur within the application area (Ninox, 2013; GIS Database) (Appendix B.4).

B.2. Vegetation extent

	Pre-European area (ha)	Current extent (ha)	Extent Remaining %	Current extent in all DBCA managed land (ha)	Current proportion (%) of pre-European extent in all DBCA Managed Lands
IBRA Bioregion - Carnarvon	8,382,890.35	8,360,801.46	99.74	12.20	12.17
Beard vegetation associations - State (Western Australia)					
Veg Assoc No. 117	919,517.05	886,005.79	96.36	131,013.19	14.25
Veg Assoc No. 127	737,724.05	697,871.38	94.60	85,858.20	11.64
Veg Assoc No. 589	807,698.58	802,713.40	99.38	15,304.39	1.89
Veg Assoc No. 608	313,611.42	313,611.42	100.00	2,039.64	0.65
Veg Assoc No. 676	2,063,413.95	1,963,881.55	95.18	303,176.00	14.69
Veg Assoc No. 1271	86,683.77	86,555.32	99.85	247.86	0.29
Beard vegetation associations - Bioregion					
Veg Assoc No. 117	12,424.35	10,907.99	87.80	27.50	24.12
Veg Assoc No. 127	102,780.91	101,489.55	98.74	2.03	1.94
Veg Assoc No. 589	78,100.80	77,834.93	99.66	N/A	N/A
Veg Assoc No. 608	312,836.44	312,836.44	100.00	0.65	0.65
Veg Assoc No. 676	51,983.51	51,232.57	98.56	28.96	28.92
Veg Assoc No. 1271	41,655.00	41,647.96	99.98	0.28	0.28

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B.3. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix E.1), and biological survey information (Mattiske, 2013) the following conservation significant flora have been found to occur within a 50 kilometre radius of the application area.

Species name	WA status	Distance of closest record to application area (km)	Number of known records (total)
Abutilon sp. *Onslow*	P3	21	14
Abutilon sp. *Pritzelianum*	P3	40	51
Corchorus congener	P3	27	28
Grevillea subterlineata Makinson	P3	0	12
Eremophila forrestii subsp. *viridis Chinnock*	P3	0	5

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

B.4. Fauna analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix E.1), and biological survey information (Ninox, 2013) the following conservation significant fauna have been assessed and found to possibly occur within the application area.

Species name	Common Name	EPBC Status	WA Status
Reptiles			
Liasis olivaceus barroni	Pilbara olive python	VU	VU
Birds			
Actitis hypoleucos	Common sandpiper	MI	MI
Apus pacificus	Fork-tailed swift	MI	MI
Calidris acuminata	Sharp-tailed sandpiper	MI	MI
Calidris ruficollis	Red-necked stint	MI	MI
Charadrius veredus	Oriental plover	MI	MI
Falco hypoleucos	Grey falcon	-	VU
Falco peregrinus	Peregrine falcon	-	OS
Gelochelidon nilotica	Gull-billed tern	MI	MI
Glareola maldivarum	Oriental pratincole	MI	MI
Hydroprogne caspia	Caspian tern	MI	MI
Limosa lapponica	Bar-tailed godwit	MI	MI
Limosa lapponica menzbieri	Bar-tailed godwit (northern Siberian)	CR	CR
Limosa limosa	Black-tailed godwit	MI	MI
Pandion haliaetus	Osprey	MI	MI
Plegadis falcinellus	Glossy ibis	MI	MI
Thalasseus bergii	Crested tern	MI	MI
Tringa nebularia	Common greenshank	MI	MI
Mammals			
Leggadina lakedownensis	Lakeland Downs mouse	-	P4

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority, OS: Other Specially Protected

Appendix C. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
Principle (a): *"Native vegetation should not be cleared if it comprises a high level of biodiversity."* Assessment: The flora and vegetation survey undertaken by Mattiske (2013) identified 30 different vegetation communities within the application area. The primary causes of disturbance within the application area were clearing, vehicle and cattle movement and grazing activities (Mattiske, 2013). Coastal communities CP3 and CP4 are in a degraded condition due to the domination of Buffel Grass (Cenchrus ciliaris) in the area (Mattiske, 2013). None of the vegetation communities were identified as being a Priority Ecological Community (Mattiske, 2013). A total of 139 flora species were recorded by the flora survey undertaken by Mattiske (2013). Compared to other surveys within the Pilbara, the average number of species found at each site indicates that the application area has a relatively low species diversity (Mattiske, 2013). The Priority 3 flora species *Eremophila forrestii* subsp. *viridis* and *Grevillea subterlineata* were both recorded within the application area (Mattiske, 2013), however, the vegetation communities these species were recorded from were well represented within the surrounding local areas. Given the proposed clearing for pipeline maintenance is narrow and linear in nature and will be undertaken in previously cleared areas, is not likely to have any additional impact on the biodiversity within the application area.	Not likely to be at variance As per CPS 8278/1	No
Principle (b): *"Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna."* Assessment: The proposed clearing for pipeline maintenance will occur within previously cleared areas and therefore not affect new areas of significant habitat for fauna.	Not likely to be at variance As per CPS 8278/1	Yes *Refer to Section 3.2.1, above.*
Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."* Assessment: There are no known records of Threatened flora within a 50 kilometre radius of the application area (GIS Database). A flora survey of the application area did not record any species of Threatened flora (Mattiske, 2013).	Not likely to be at variance As per CPS 8278/1	No
Principle (d): *"Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community."* Assessment: There are no known Threatened Ecological Communities (TECs) located within a 50 kilometre radius of the application area (GIS Database). A flora and vegetation survey of the application area did not identify any TECs (Mattiske, 2013).	Not likely to be at variance As per CPS 8278/1	No
Environmental value: significant remnant vegetation and conservation areas		
Principle (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."* Assessment: The application area falls within the Carnarvon Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 99% of the pre-European vegetation still exists in the IBRA Carnarvon Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation associations; 117, 127. 589, 608, 676 and 1271 (GIS Database). These vegetation associations have not been extensively cleared as over 85% of the pre-European extent of these vegetation	Not at variance As per CPS 8278/1	No

Assessment against the clearing principles	Variance level	Is further consideration required?
association remain uncleared at a state and bioregional level (Government of Western Australia, 2019).		
Principle (h): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area."* Assessment: The application area is not located within any conservation areas (GIS Database). The nearest conservation area is Cane River Conservation Park, located approximately 15 kilometres east of the application area (GIS Database). Given the distance to Cane River Conservation Park, the proposed clearing is unlikely to have an impact on the environmental values of any conservation areas.	Not likely to be at variance As per CPS 8278/1	No
Environmental value: land and water resources		
Principle (f): *"Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."* Assessment: The application area crosses several non-perennial watercourses (GIS Database). The most significant of these is the Ashburton River which it crosses in two locations, once at the northern end of the application area and again at the southern end (GIS Database). The vegetation community R1 was associated with the Ashburton River in the north and vegetation community R2 is found near the Ashburton River in the south of the application area (Mattiske, 2013). The application area also crosses numerous seasonally inundated wetlands (Mattiske, 2013). The majority of these wetlands are associated with vegetation community C1: bare claypan. This vegetation community only contains isolated mixed tussock grasses (Mattiske, 2013). Given the low density of vegetation, the proposed clearing is not likely to impact on these wetland areas. In the north of the application area the proposed clearing will impact vegetation community T1 which is associated with tidal mudflats. There is 56.64 hectares of this habitat mapped within the survey boundary, and approximately 7.71 hectares has been previously cleared (Australian Gas Infrastructure Group, 2018; Mattiske, 2013). Given the project will clear vegetation growing in association with watercourses and wetlands, the proposed clearing is at variance to this Principle. Despite this variance, the proposed pipeline maintenance clearing will be narrow and linear in nature and occur on previously cleared areas. Therefore, due to past clearing and disturbance activities occurring within the application area, the proposed clearing is not likely to have any additional significant impacts on these waterbodies. Care should be taken to ensure that the proposed clearing activities do not alter the surface flow of watercourses. Potential impacts to watercourses and wetlands intersecting the application area may be minimised through the continuous implementation of a watercourse management condition.	At variance As per CPS 8278/1	No
Principle (g): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."* Assessment: The application area has been mapped as occurring on the Cheetara, Dune, Globe, Littoral, Minderoo, Nanyarra, Onslow and Yankagee land systems (GIS Database). Coastal dune systems of the Onslow and Littoral lands systems have a high susceptibility to wind erosion if cleared (Payne et al., 1988). Some inland areas associated with watercourses may be moderately susceptible to erosion (Payne et al., 1988). Given the application area is relatively flat and narrow, and the proposed activities are for maintenance activities occurring on previously cleared areas, the clearing is not likely to result in any appreciable land degradation (GIS Database).	Not likely to be at variance As per CPS 8278/1	No
Principle (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."* Assessment:	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
There are no permanent watercourses within the application area, however, it crosses the Ashburton River in two locations (GIS Database). The proposed clearing is a narrow corridor of six meters on each side of the pipeline (AGI Development Group Nominees Pty Limited, 2023) and whilst it will cross a number of seasonally wet areas it is not likely to cause a deterioration of surface water quality. The closest Public Drinking Water Source is the Cane River Water Reserve (P1) located approximately 37 kilometres east of the application area (GIS Database). The Cane Water Reserve contains two Wellhead Protection Zones to further protect the water source from contamination in the immediate vicinity of production bores (Government of Western Australia, 2016). In 2015, the Department of Water conducted an assessment of the Cane River Water Reserve boundary concluding the existing boundary is sufficient in protecting the current production bores and did not recommend any changes (Government of Western Australia, 2016). Given the Cane River Water Reserve lies approximately 37 kilometres east of the application area, the quality of groundwater is unlikely to be significantly impacted from the proposed clearing.	As per CPS 8278/1	
Principle (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."* Assessment: No permanent watercourses or wetlands are recorded within the application area and the average annual evaporation (3,200 to 3,600 millimetres) (BoM, 2023) is higher than the average annual rainfall (305.8 millimetres) (BoM, 2023). Coupled with the fact the proposed maintenance clearing will be limited to previously disturbed areas (AGI Development Group Nominees Pty Limited, 2023), the proposed clearing is unlikely to cause excessive levels of water runoff that would exacerbate the incidence or intensity of flooding in the local area.	Not likely to be at variance As per CPS 8278/1	No

Appendix D. 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 Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Measuring vegetation condition for the South West and Interzone Botanical Province (Keighery, 1994)

Condition	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance.
Excellent	Vegetation structure intact, with disturbance affecting individual species; weeds are non-aggressive species.
Very good	Vegetation structure altered, with obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and/or grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and/or grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and/or grazing.
Completely degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

Appendix E. Sources of information

E.1. GIS databases

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

- Aboriginal Heritage Places (DPLH-001)
- Clearing Regulations – Schedule One Areas (DWER-057)
- DBCA – Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Environmentally Sensitive Areas (DWER-046)
- Groundwater Salinity Statewide (DWER-026)
- Hydrographic Catchments – Catchments (DWER-028)
- Hydrography – Inland Waters – Waterlines
- Hydrography, Linear (DWER-031)
- IBRA Vegetation Statistics
- Native Title (ILUA) (LGATE-067)
- Pre-European Vegetation Statistics
- Regional Parks (DBCA-026)
- Remnant Vegetation, All Areas
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Mapping – Best Available (DPIRD-027)
- Soil Landscape Mapping – Rangelands (DPIRD-064)
- WA Now Aerial Imagery

Restricted GIS Databases used:

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

E.2. References

Australian Gas Infrastructure Group (2018) Native Vegetation Clearing Permit Application, Supporting Documentation. Australian Gas Infrastructure Group, November 2018.

AGI Development Group Nominees Pty Limited (2023) Clearing permit application form, CPS 8278/2, received 9 May 2023.

Bureau of Meteorology (BoM) (2023) Bureau of Meteorology Website – Climate Data Online, Onslow Airport. Bureau of Meteorology. http://www.bom.gov.au/climate/data/ (Accessed 13 September 2023).

Department of Environment Regulation (DER) (2014) *A guide to the assessment of applications to clear native vegetation*. Perth. Available from: 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) (2023) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS (Accessed 14 September 2023).

Department of Primary Industries and Regional Development (DPIRD) (2023) NRInfo Digital Mapping. Department of Primary Industries and Regional Development. Government of Western Australia. URL: https://dpird.maps.arcgis.com/apps/webappviewer/index.html?id=662e8cbf2def492381fc915aaf3c6a0f (Accessed 13 September 2023).

Department of Water and Environmental Regulation (DWER) (2021) Procedure: Native vegetation clearing permits. Joondalup. Available from: https://dwer.wa.gov.au/sites/default/files/Procedure_Native_vegetation_clearing_permits_v1.pdf

Environmental Protection Authority (EPA) (2016) Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment. Available from: http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey_Dec13.pdf

Environmental Protection Authority (EPA) (2016) Technical Guidance – Terrestrial Fauna Surveys. Available from: https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/Tech%20guidance-%20Terrestrial%20Fauna%20Surveys-Dec-2016.pdf

Environmental Protection Authority (EPA) (2020) Technical Guidance – Terrestrial Fauna Surveys. Available from: https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/2020.09.17%20-%20EPA%20Technical%20Guidance%20-%20Vertebrate%20Fauna%20Surveys%20-%20Final.pdf

Government of Western Australia (2016) Cane River Water Reserve: Drinking water source protection review, Onslow Town Water Supply, Department of Water, Water Resource Protection Series No WRP 163.

Government of Western Australia (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions. https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Mattiske (2013) Flora and Vegetation of the CS2 - Tubridgi - Wheatstone Gas Pipeline Project Area. Report prepared for DBP by Mattiske Consulting Pty Ltd, dated April 2013.

Ninox (2013) Level 1 Vertebrate Fauna Assessment of the Proposed Tubridgi to Wheatstone Gas Pipeline, Western Australia. Report prepared for Mattiske Consulting Pty Ltd by Ninox Wildlife Consulting, dated April 2013.

Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68) Atlas of Australian Soils, Sheets 1 to 10, with explanatory data. CSIRO and Melbourne University Press: Melbourne.

Payne, A.L., Mitchell, A.A. and Holman, W.F. (1988) An Inventory and Condition Survey of Rangelands in the Ashburton River Catchment, Western Australia. Department of Agriculture, Western Australia.

Submission (2023) Public submission in relation to clearing permit application CPS 8278/2, received 12 June 2023.

Western Australian Herbarium (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions, Western Australia. https://florabase.dpaw.wa.gov.au/ (Accessed 13 September 2023).

4. Glossary

Acronyms:

BC Act	*Biodiversity Conservation Act 2016,* 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
DER	Department of Environment Regulation, Western Australia (now DWER)
DMIRS	Department of Mines, Industry Regulation and Safety, Western Australia
DMP	Department of Mines and Petroleum, Western Australia (now DMIRS)
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	*Environmental Protection Act 1986*, Western Australia
EPA	Environmental Protection Authority, Western Australia
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Federal 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	*Rights in Water and Irrigation Act 1914*, Western Australia
TEC	Threatened Ecological Community

Definitions:

{DBCA (2019) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia}:-

T **Threatened species:**

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 that subset of 'Specially Protected Fauna' listed under schedules 1 to 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for Threatened Fauna.

Threatened flora is that subset of 'Rare Flora' listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.

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. Published under schedule 1 of the *Wildlife*

Conservation (Specially Protected Fauna) Notice 2018 for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

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. Published under schedule 2 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for endangered flora.

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. Published under schedule 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for vulnerable fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for vulnerable flora.

Extinct Species:

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).

Published as presumed extinct under schedule 4 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for extinct fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for extinct flora.

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. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

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).

Includes birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and 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.

Published as migratory birds protected under an international agreement under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

CD **Species of special conservation interest (conservation dependent fauna)**
Fauna of special conservation need being species 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).

Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

OS **Other specially protected species**
Fauna 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).

Published as other specially protected fauna under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

P **Priority species:**

Possibly threatened species that do not meet survey criteria, 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 priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

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

Assessment of Priority codes 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**
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, e.g. 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 and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

P2 **Priority Two - Poorly-known species**
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, e.g. 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 and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

P3 **Priority Three - Poorly-known species**
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. Such species are in need of 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 Conservation Dependent.
(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

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.