



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 8522/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: APA (Pilbara Pipeline) Pty Ltd

1.3. Property details

Property: Pipeline Licence 38
Easement 964674 under *Petroleum Pipelines Act 1969*
Local Government Area: City of Karratha
Colloquial name: Burrup Extension Pipeline

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
10.3		Mechanical Removal	Pipeline Maintenance

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 13 February 2020

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	The vegetation of the application area is broadly mapped as the following Beard vegetation associations: 117: Hummock grasslands, grass steppe; soft spinifex; 127: Bare areas; mud flats; and 589: Mosaic: Short bunch grassland - savanna / grass plain (Pilbara) / Hummock grasslands, grass steppe; soft spinifex (GIS Database).
Clearing Description	Burrup Extension Pipeline. APA (Pilbara Pipeline) Pty Ltd proposes to clear up to 10.3 hectares of native vegetation within a boundary of the same size, for the purpose of gas pipeline maintenance. The project is located approximately 1.5 kilometres west of Karratha Airport and extends north-west then north-east to Burrup, within the Shire of Karratha.
Vegetation Condition	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994). To: Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).
Comment	The proposed clearing is to maintain line of sight between pipeline markers, maintenance of access tracks and for integrity dig requirements along the Burrup Gas Pipeline, constructed in 1998. The pre-existing pipeline is 24 kilometres long, within a 20 metre wide pipeline corridor. The pipeline transports gas from the Woodside Natural Gas Treatment Plant (near Whitnell Bay at Dampier) to the Pilbara Energy Pipeline. The proposed clearing is for the first 17.2 kilometres from the Woodside Natural Gas Treatment Plant. Clearing will be restricted to areas previously cleared for pipeline construction and is to be a total width of six metres to maintain line of sight. Vegetation management along the pipeline is a requirement of the <i>Petroleum Pipelines Act 1969</i> through the Pipeline Licence and AS2885 for pipeline safety and integrity (APA, 2019).

3. Assessment of application against Clearing Principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments

Proposal may be at variance to this Principle

The clearing permit application area is located within the Roebourne subregion of the Interim Biogeographic Regionalisation for Australia (IBRA) Pilbara Bioregion (GIS Database). The Roebourne subregion is characterised by quaternary alluvial and older colluvial coastal and subcoastal plains, supporting a grass savannah of mixed bunch and hummock grasses, and dwarf shrub steppe of *Acacia stellaticeps* or *Acacia pyrifolia* and *Acacia inaequilatera* (CALM, 2002). Uplands are dominated by *Triodia* hummock grasslands, ephemeral drainage lines support *Eucalyptus victrix* or *Corymbia hamersleyana* woodlands and samphire, *Sporobolus* and mangal occur on marine alluvial flats and river deltas (CALM, 2002). Resistant linear ranges of basalts occur across the coastal plains, with minor exposures of granite (CALM, 2002).

The application area exists within the EPA Red Book area; Coastal Region: Mary Anne Islands to Cape Keraudren, which encompasses tidal-supratidal flats in the coastal segment from Southern Exmouth Gulf to Cap Keraudren (EPA, 1975). This area is believed to provide a supply of nutrients for the adjacent marine ecosystem and function as a nursery area for fisheries. The proposed clearing is unlikely to significantly impact this area.

No Threatened Ecological Communities were identified within the application area or in close proximity (GIS Database). Three Priority Ecological Communities (PECs) were identified within close proximity to the application area; the Burrup Peninsula rock pile and Burrup Peninsula rock pool PECs (both P1) have been recorded within 100 metres of the application area, and the Roebourne Plains gilgai grasslands PEC (P1) also exists within 200 metres of the application area (GIS Database). The Burrup Peninsula rock pile PEC is described as pockets of vegetation in rock piles, rock pockets and outcrops comprising a mixture of Pilbara and Kimberley species, communities are different from those of the Hamersley and Chichester Ranges and is known to support short-range endemic land snails (DBCA, 2019). The Burrup Peninsula rock pool PEC is described as calcareous tufa deposits with interesting aquatic snails (DBCA, 2019). Although it is possible that these PECs occur within the application area, the proposed clearing is unlikely to significantly impact the conservation of any of these PECs due to the area having been previously cleared and the narrow corridor that is proposed to be cleared.

No Threatened flora species were identified as potentially occurring within the application area (DBCA, 2007-). A desktop assessment identified ten Priority flora species that have the potential to occur based on previous records within 20 kilometres of the application area (DBCA, 2007-). Although a number of these species are endemic to the Pilbara IBRA Region, none of these species are endemic to the Burrup Peninsula (Western Australian Herbarium, 1998-; GIS Database). The application area is likely to contain conservation significant flora species, however the clearing of a six metre corridor, that has previously been cleared and exists within an area surrounded by intact vegetation, is unlikely to have significant impacts on the local populations of these species.

A number of weed species may potentially be present within the application area. Weeds have the potential to out-compete native flora and reduce the biodiversity of an area. Potential impacts to biodiversity as a result of the introduction and spread of weeds may be minimised by the implementation of a weed management condition.

A desktop assessment identified 62 conservation significant fauna species previously recorded within 20 kilometres of the application area, including 13 Threatened species, 38 species protected under international agreements, four other specially protected species and seven Priority species (DBCA, 2007-). The conservation significant fauna species include 47 birds, seven marine reptiles and mammals, five terrestrial mammals and three terrestrial reptiles. The majority of these species are migratory or marine animals and are unlikely to be residents in the area. However, a small section of the application area passes through an area of saline coastal flats that may be seasonally inundated and may potentially provide high habitat value and be utilised by migratory or other conservation significant birds (GIS Database). To minimise potential impacts to birds utilising these areas, a condition limiting clearing to dry soils conditions may be imposed. A number of conservation significant fauna species are likely to forage within the application area, however, as the majority of these are highly mobile avian species and the application area is unlikely to contain any suitable roosting areas due to being previously cleared and lacking mature trees, it is unlikely that these species will be impacted by the proposed clearing. Of the terrestrial mammals and reptiles, four species may potentially utilise the application area including: the northern quoll, *Dasyurus hallucatus* (Threatened); Pilbara olive python, *Liasis olivaceus barroni* (Threatened); northern short-tailed mouse, *Leggadina lakedownensis* (P4); and lined soil-crevice skink, *Notoscincus butleri* (P4). The northern quoll and Pilbara olive python are likely to be transient visitors within the application while foraging or dispersing, however the application area is unlikely to contain rocky areas with boulders that is considered to be core habitat of the species (DotE, 2020; GIS Database). All species potentially present within the application area are highly mobile and may move into adjacent intact vegetation, therefore are unlikely to be significantly impacted by the proposed clearing of a six metre wide corridor.

The vegetation associations, fauna habitats and landform types present within the application area are well represented in surrounding areas (GIS Database). The application area is unlikely to represent an area of higher biodiversity than surrounding areas, in either a local or regional context.

Based on the above, the proposed clearing may be at variance to this Principle.

Methodology CALM (2002)
DBCA (2007-)
DBCA (2019)
DotE (2020)
EPA (1975)
Western Australian Herbarium (1998-)

GIS Database:
- IBRA Australia
- Imagery
- Pre-European Vegetation
- Threatened and Priority Ecological Communities Boundaries
- Threatened and Priority Ecological Communities Buffers
- Threatened and Priority Flora
- Threatened Fauna

(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 indigenous to Western Australia.

Comments Proposal is not likely to be at variance to this Principle

The fauna habitats present within the application area are likely to be utilised by a number of fauna species, including a number of conservation significant species. Although the application area may contain suitable foraging habitat for a number of species, the six metre wide corridor proposed to be cleared has historically been cleared and is unlikely to contain higher value roosting, denning or sheltering habitat than surrounding areas. The application area is unlikely to represent significant fauna habitat as the fauna habitats present within the application area are well represented outside of the application area and intact native vegetation exists adjacent to the application area (GIS Database).

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Database:
- Imagery
- Pre-European Vegetation
- Threatened Fauna

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Comments Proposal is not likely to be at variance to this Principle

There are no known records of Threatened flora within the application area (GIS Database).

The vegetation associations within the application area are common and widespread within the region (GIS Database), and the vegetation proposed to be cleared is unlikely to be necessary for the continued existence of any species of Threatened (rare) flora.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Database:
- Pre-European Vegetation
- Threatened and Priority 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.

Comments Proposal is not likely to be at variance to this Principle

There are no known Threatened Ecological Communities (TECs) located within or in close proximity to the application area (GIS Database). No TECs are known from the Burrup Peninsula (GIS Database).

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Database:
- Threatened and Priority Ecological Communities Boundaries
- Threatened and Priority Ecological Communities Buffers

(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.

Comments Proposal is not at variance to this Principle

The application area falls within the Pilbara Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 99% of the pre-European vegetation still exists in the IBRA Pilbara Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation associations 117: Hummock grasslands, grass steppe; soft spinifex; 127: Bare areas; mud flats; and 589: Mosaic: Short bunch grassland - savanna / grass plain (Pilbara) / Hummock grasslands, grass steppe; soft spinifex (GIS Database). Approximately 89-99% of the pre-European extent of each of these vegetation associations remains uncleared at both the state and bioregional level (Government of Western Australia, 2019).

Therefore, the application area does not represent a significant remnant of native vegetation in an area that has been extensively cleared.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in DBCA managed lands
IBRA Bioregion – Pilbara	17,808,657	17,731,764	~99	Least Concern	~10
Beard vegetation associations – WA					
117	919,517	886,005	~96	Least Concern	~15
127	737,724	697,871	~94	Least Concern	~12
589	807,698	802,713	~99	Least Concern	~1
Beard vegetation associations – Pilbara Bioregion					
117	82,705	78,096	~94	Least Concern	~21
127	177,749	159,595	~89	Least Concern	~2
589	728,768	724,695	~99	Least Concern	~2

* Government of Western Australia (2019)

** Department of Natural Resources and Environment (2002)

Based on the above, the proposed clearing is not at variance to this Principle.

Methodology Department of Natural Resources and Environment (2002)
Government of Western Australia (2019)

GIS Database:
- IBRA Australia
- Pre-European Vegetation

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Comments Proposal is at variance to this Principle

There are no permanent watercourses or wetlands within the area proposed to clear (GIS Database). Numerous seasonal creek lines pass through the application area and the application area also crosses saline coastal flats subject to inundation (GIS Database). Creek lines in the region are dry for most of the year, only flowing briefly immediately following significant rainfall (Van Vreeswyk et al., 2004).

Based on the above, the proposed clearing is at variance to this Principle. Potential impacts to vegetation growing in association with watercourses may be minimised by the implementation of a watercourse management condition.

Methodology Van Vreeswyk et al. (2004)

GIS Database:
- Hydrography, Lakes
- Hydrography, linear

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments Proposal is not likely to be at variance to this Principle

The application area lies within the Cheerawarra, Granitic and Littoral land systems (GIS Database). These land systems have been mapped and described in technical bulletins produced by the former Department of Agriculture (now the Department of Primary Industries and Regional Development).

The Cheerawarra land system is characterised by sandy coastal plains and saline clay plains supporting soft and hard spinifex grasslands and minor tussock grasslands (Van Vreeswyk et al., 2004). Most units of this land system are highly susceptible to wind erosion if vegetative cover is depleted (Van Vreeswyk et al., 2004).

The Granitic land system is characterised by rugged granitic hills supporting shrubby hard and soft spinifex grasslands (Van Vreeswyk et al., 2004). This land system is not susceptible to erosion (Van Vreeswyk et al., 2004).

The Littoral land system is characterised by bare coastal mudflats with mangroves on seaward fringes, samphire flats, sandy islands, coastal dunes and beaches (Van Vreeswyk et al., 2004). Most land units of this land system are highly susceptible to wind erosion if vegetative cover is depleted (Van Vreeswyk et al., 2004).

The proposed clearing of up to 10.3 hectares of native vegetation along a six metre wide pipeline easement, for the purpose of pipeline maintenance, is unlikely to cause appreciable land degradation due to the majority of clearing being raised blade and rootstocks primarily being maintained (APA, 2019).

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology APA (2019)
Van Vreeswyk et al. (2004)

GIS Database:
- Landsystem Rangelands

(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.

Comments Proposal is not likely to be at variance to this Principle

There are no conservation areas in the vicinity of the application area. The nearest DBCA (formerly DPaW) managed land is the Murujuga National Park which is located adjacent to the application area, approximately 100 metres away at the closest points (GIS Database). The proposed clearing is unlikely to impact on the environmental values of any conservation area as it is to be confined to areas previously cleared.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Database:
- DPaW Tenure

(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.

Comments Proposal is not likely to be at variance to this Principle

There are no Public Drinking Water Source Areas within or in close proximity to the application area (GIS Database). There are no permanent watercourses or wetlands within the area proposed to clear (GIS Database). Numerous seasonal creek lines pass through the application area and the application area also crosses saline coastal flats subject to inundation. Creek lines in the region are dry for most of the year, only flowing briefly immediately following significant rainfall. The proposed clearing of a six metre wide corridor is unlikely to result in significant changes to surface water flows and is unlikely to cause deterioration in the quality of underground water.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Database:
- Hydrography, Linear
- Public Drinking Water Source Areas

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Comments Proposal is not likely to be at variance to this Principle

The climate of the region is arid (semi-desert) tropical, with highly variable rainfall falling mainly in summer

(CALM, 2002). The nearest weather station is Karratha Aero, approximately 1.5 kilometres east of the application area, with an average rainfall of approximately 292.4 millimetres per year (BoM, 2020).

There are no permanent water courses or waterbodies within the application area (GIS Database). Seasonal drainage lines are common in the region and temporary localised flooding may occur briefly following heavy rainfall events. However, the proposed clearing is unlikely to increase the incidence or intensity of natural flooding events.

The application area is located within the Coastal catchment area of the Port Hedland Coast basin which covers a total area of approximately 744,301 hectares (GIS Database). The proposed clearing for pipeline maintenance purposes is not likely to significantly impact on the drainage characteristics of the catchment, or the local area.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology BoM (2020)
CALM (2002)
Van Vreeswyk et al. (2004)

GIS Database:
- Hydrographic Catchments - Catchments
- Hydrography, linear

Planning Instrument, Native Title, previous EPA decision or other matter.

Comments

The clearing permit application was advertised on 17 June 2019 by the Department of Mines, Industry Regulation and Safety (DMIRS), inviting submissions from the public. No submissions were received in relation to this application.

There is one native title claim (WC1999/014) over the area under application (DPLH, 2020). This claim has been determined by the Federal Court on behalf of the claimant group. However, the 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 91 registered Aboriginal Sites of Significance within the application area (DPLH, 2020). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

It is 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.

Methodology DPLH (2020)

4. References

- APA (2019) Burrup Extension Pipeline (PL 38) – Native Vegetation Clearing Purpose Permit Application. APA Group, May 2019.
- BoM (2020) Bureau of Meteorology Website – Climate Data Online, Karratha Aero. Bureau of Meteorology. <http://www.bom.gov.au/climate/data/> (Accessed 3 February 2020).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DBCA (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Biodiversity, Conservation and Attractions. <https://naturemap.dbca.wa.gov.au/> (Accessed 4 February 2020).
- DBCA (2019) Priority Ecological Communities for Western Australia Version 28. Department of Biodiversity, Conservation and Attractions. <https://www.dpaw.wa.gov.au/plants-and-animals/threatened-species-and-communities/wa-s-threatened-ecological-communities> (Accessed 4 February 2020).
- DotE (2020) Species Profile and Threats Database, Department of the Environment, Canberra. <http://www.environment.gov.au/sprat>.
- DPLH (2020) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <http://maps.daa.wa.gov.au/AHIS/> (Accessed 3 February 2020).
- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
- EPA (1975) Conservation Reserves for Western Australia. Environmental Protection Authority, Western Australia.

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, Perth. <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.

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 (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. <https://florabase.dpaw.wa.gov.au/> (Accessed 3 February 2020).

5. Glossary

Acronyms:

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)
DBCA	Department of Biodiversity, Conservation and Attractions, Western Australia
DEC	Department of Environment and Conservation, Western Australia (now DBCA and DWER)
DoEE	Department of the Environment and Energy, Australian Government
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)
DPIRD	Department of Primary Industries and Regional Development, Western Australia
DPLH	Department of Planning, Lands and Heritage, Western Australia
DRF	Declared Rare Flora
DoE	Department of the Environment, Australian Government (now DoEE)
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DoEE)
DWER	Department of Water and Environmental Regulation, Western Australia
EPA	Environmental Protection Authority, Western Australia
EP Act	<i>Environmental Protection Act 1986</i> , Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (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	<i>Rights in Water and Irrigation Act 1914</i> , 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.