

Clearing Permit Decision Report

1. Application details and outcomes

1.1. Permit application details

Permit number:	9728/1
Permit type:	Area Permit
Applicant name:	Onslow Salt Pty Ltd
Application received:	6 May 2022
Application area:	0.525 hectares
Purpose of clearing:	Potable water treatment plant
Method of clearing:	Mechanical Removal
Tenure:	General Purpose Lease 8SA
Location (LGA area/s):	Shire of Ashburton
Colloquial name:	Onslow Salt Potable Water Treatment Plant

1.2. Description of clearing activities

Onslow Salt Pty Ltd proposes to clear up to 0.525 hectares of native vegetation, for the purpose of building a potable water treatment facility. The project is located approximately 0.5 kilometres west of Onslow, within the Shire of Ashburton.

The application is to allow for the building of a potable water treatment facility to provide water for the use of Onslow Salt Pty Ltd only. The application area is adjacent to previously cleared land for construction activities.

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	30 June 2022
Decision area:	0.525 hectares of native vegetation

1.4. Reasons for decision

This clearing permit application was made in accordance with section 51E of the *Environmental Protection Act 1986* (EP Act) and was received by the Department of Mines, Industry Regulation and Safety (DMIRS) on 6 May 2022. DMIRS advertised the application for a public comment for a period of 21 days, and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (Appendix B), relevant datasets (Appendix F), supporting information provided by the applicant (Appendix A) including representative photos of the flora and vegetation (Appendix E), the clearing principles set out in Schedule 5 of the EP Act (Appendix D), 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
- potential land degradation in the form of wind erosion.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (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 applicant has suitably demonstrated avoidance and minimisation measures.

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

- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds; and
- commence construction no later than three months after undertaking clearing to reduce the risk of erosion.

2. Legislative context

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

In addition to the matters considered in accordance with section 510 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; and
- the principle of the conservation of biological diversity and ecological integrity.

Other legislation of relevance for this assessment includes:

Biodiversity Conservation Act 2016 (WA) (BC Act)

- Conservation and Land Management Act 1984 (WA) (CALM Act)
- Mining Act 1978 (WA)
- Any relevant State Agreements (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)
- Technical guidance Terrestrial Fauna Surveys for Environmental Impact Assessment (EPA, 2016)

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

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. The applicant reduced the application area from 0.6 hectares to 0.525 hectares, to avoid the clearing of 35 individuals of *Abutilon* sp. *pritzelanum*, a Priority 3 species.

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix B) 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 land and water resources. 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. Land and water resources (wind erosion) - Clearing Principles (g)

Assessment

The application area is located within the Dune land system, which is described as dune fields supporting soft spinifex grasslands (GIS Database; van Vreeswyk et al., 2004). Spinifex grasslands have some susceptibility to wind erosion immediately following burning but stabilisation occurs rapidly after rain (van Vreeswyk et al., 2004). The susceptibility for wind erosion within the application area ranges from moderate to high as soils within the application are highly mobile.

Conclusion

For the reasons set out above, it is considered that land degradation may occur as a result of the proposed clearing. However, due to the small scale of the proposed clearing, this impact can be managed through conditions placed on the clearing permit.

Conditions

To address the above impacts, the following management measure will be required as a condition on the clearing permit:

• A staged clearing condition which requires areas are utilised within 3 months of clearing being undertaken.

3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on 7 June 2022 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received in relation to this application.

There is one native title claim over the area (WC1999/042) under application (DPLH, 2022). This claim has been determined by the Federal Court on behalf of the claimant group. However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are two registered Aboriginal Sites of Significance within the application area (DPLH, 2022). 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.

End

Appendix A. Additional information provide	d by applicant
Summary of comments	Consideration of comment
The application area was reduced from 0.6 ha to 0.525 ha in order to avoid impacting Priority flora within the application area.	This action was taken into consideration as an avoidance measure.
Following the application area change, Onslow Salt Pty Ltd provided a new shapefile to match the new application area.	This new shapefile was used to create a map of the allowed clearing area. This map is attached to the clearing permit.
A biological assessment performed by Biota in 2022 was provided with this application.	This document was used in the assessment of principles a, b, c, and d.

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 adjacent to an area previously cleared for construction activities.
Ecological linkage	According to available databases, the application area does not contain any known or mapped ecological linkages.
Conservation areas	The closest mapped conservation area is approximately 21 kilometres south of the application area (GIS Database).
Vegetation description	 The vegetation of the application area is broadly mapped as the following Beard vegetation association: 117: Hummock grasslands, grass steppe; soft spinifex (GIS Database). A flora and vegetation survey was conducted over the application area by Biota during August, 2021. The following vegetation association was recorded within the application area (Biota, 2022):
	P1: TeCEIPcAj <i>Triodia epactia</i> very open hummock grassland over * <i>Cenchrus ciliaris</i> , (* <i>C. setiger</i>) tussock grassland over <i>Ipomoea costata</i> , * <i>Aerva javanica</i> very open herbland. *denotes weed species.
Vegetation condition	The vegetation survey by Biota (2022) and aerial imagery indicate the vegetation within the proposed clearing area is in Poor to Very Poor (Trudgen, 1991) condition. The full Trudgen (1991) condition rating scale is provided in Appendix D. Representative photos are available in Appendix E.
Climate and landform	The climate of the region is arid, with a low average annual rainfall of approximately 272.6 millimetres (BoM, 2022).
Soil description and land degradation risk	The soil is mapped as soil unit SV8 (GIS Database). The SV8 soil unit is described as salt flats, tidal swamps, and coastal dune sands (Northcote et al., 1960-68). Chief soils are saline loams and shelly sands with small areas of calcareous earths and shallow loams are associated with marls (Biota, 2022; Northcote et al., 1960-68). The application area is within the Dune land system (GIS Database) where soils are highly mobile and susceptible to wind erosion.
Waterbodies	The desktop assessment and aerial imagery indicated that one non-perennial lake is present 0.06 kilometres north and west from the area proposed to be cleared (GIS Database).
Hydrogeography	The proposed clearing area is within the Pilbara Groundwater Area, legislated by the <i>RIWI Act 1914</i> (GIS Database). The mapped groundwater salinity is 7,000-14,000 milligrams per litre total dissolved solids which is described as saline to highly saline (GIS Database).
Flora	There are no Threatened or Priority species within the application area (GIS Database; Biota, 2022).
Ecological communities	There are no mapped Threatened Ecological Communities within a 40 kilometre radius of the proposed clearing area (GIS Database; Biota, 2022).

Characteristic	Details
	The closest Priority Ecological Communities (PECs) are the Coastal dune tussock grassland dominated by <i>Whiteochloa airoides</i> (Priority 3) located 25 kilometres northwest of the application area (GIS Database, Biota, 2022) and the Peedamulla Swamp Community (Priority 1) located approximately 25 kilometres east of the proposed clearing area (GIS Database).
Fauna	There are no conservation significant fauna species recorded within the application area or local area (GIS Database; Biota, 2022).

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."	Not likely to be at	No
Assessment:	variance	
During the field survey, a total of 13 native flora species were recorded within the application area. The area proposed to be cleared does not contain significant flora. There is a population of 35 individuals of Priority 3 flora <i>Abutilon</i> sp. <i>pritzelanum</i> close to the northern boundary of the application area (Biota, 2022). This area was omitted from the application to avoid the disturbance of this population. No Threatened or Priority Ecological Communities where found within or near the application area (GIS Database).		
There were four weed species were recorded within the application area (Biota, 2022), none of which are listed as Declared Pests or Weeds of National Significance (WONS). Weeds have the potential to alter the biodiversity of an area, competing with native vegetation for available resources and making areas more fire prone. Care should be taken to ensure that weeds are not introduced into the area as the result of clearing activities. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.		
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."	Not likely to be at variance	No
Assessment:		
The area proposed to be cleared is very small and does not contain significant habitat for fauna. The habitat in the proposed clearing area does not represent core habitat for any listed species of significance (Biota, 2022).		
Principle (c): "Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."	Not likely to be at	No
Assessment:	variance	
The area proposed to be cleared does not contain any Threatened flora species, or vegetation necessary for their existence within or near the application area (GIS Database).		
No Threatened flora species were recorded or would be expected to occur within or near the area proposed for clearing (Biota, 2022).		
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."	Not likely to be at variance	No
Assessment:		
There are no known Threatened Ecological Community (TEC) within or in		

Assessment against the clearing principles	Variance level	Is further consideration required?
No TECs are known to occur within 40 kilometres of the application area (Biota, 2022).		
Environmental value: significant remnant vegetation and conservation ar	eas	
<u>Principle (e):</u> "Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."	Not at variance	No
Assessment:		
The application area is located within the Carnarvon Interim Biogeographic Regionalisation of Australia (IBRA) Bioregion. Approximately 99 per cent of the pre-European vegetation still exists in the Carnarvon Bioregion (Government of Western Australia, 2019). Beard vegetation association 117 has not been extensively cleared as approximately 96 per cent of the pre- European extent of this vegetation association remains uncleared at state level, and 85 per cent at the bioregional level (Government of Western Australia, 2019).		
<u>Principle (h):</u> "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."	Not likely to be at variance	No
Assessment:		
There are no conservation areas in the vicinity of the application area. The closest DBCA managed land is located approximately 21 kilometres south of the proposed clearing area (GIS Database).		
Given the distance to the nearest conservation area, the proposed clearing is not likely to have an impact on the environmental values of any conservation areas.		
Environmental value: land and water resources		
<u>Principle (f):</u> "Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."	Not likely to be at	No
Assessment:	variance	
There are no permanent watercourses or wetlands recorded within or near the application area. There is a non-perennial lake within 60 metres of the application area (GIS Database).		
Due to the small size of the application area and previous clearing on adjacent land closer to the watercourse, the proposed clearing is unlikely to impact on any watercourse or any riparian vegetation.		
<u>Principle (g):</u> "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."	May be at variance	Yes Refer to Section
Assessment:		3.2.1, above.
Noting the land system where the application area is located and the condition of the vegetation (poor to degraded), the proposed clearing may have areas susceptible to erosion.		
<u>Principle (i):</u> "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water."	Not likely to be at variance	No
Assessment:		
There are no Public Drinking Water Sources, wetlands, or watercourses within the proposed clearing area (GIS Database). Given that the annual evaporation average (2,800 millimetres) greatly exceeds the average annual rainfall (272.6 millimetres), surface water is likely to be present only for short periods of time. The small amount of proposed clearing is unlikely to impact surface or ground water quality.		
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Assessment against the clearing principles	Variance level	Is further consideration required?
<u>Principle (j):</u> "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."	Not likely to be at variance	No
Assessment:		
There are no permanent watercourses within the application area. There is an area subject to inundation approximately 1.8 kilometres southeast of the application area (GIS Database). While high rainfall events may result in flooding of the area, the proposed clearing is unlikely to increase the incidence or intensity of natural flooding events.		

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

Trudgen, M.E. (1991) *Vegetation condition scale* in National Trust (WA) 1993 Urban Bushland Policy. National Trust of Australia (WA), Wildflower Society of WA (Inc.), and the Tree Society (Inc.), Perth.

Condition	Description
Excellent	Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.
Very good	Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated fire, the presence of some relatively non-aggressive weeds, or occasional vehicle tracks.
Good	More obvious signs of damage caused by human activity since European settlement, including some obvious impact on the vegetation structure such as that caused by low levels of grazing or slightly aggressive weeds.
Poor	Still retains basic vegetation structure or ability to regenerate it after very obvious impacts of human activities since European settlement, such as grazing, partial clearing, frequent fires or aggressive weeds.
Very poor	Severely impacted by grazing, very frequent fires, clearing or a combination of these activities. Scope for some regeneration but not to a state approaching good condition without intensive management. Usually with a number of weed species present including very aggressive species.
Completely degraded	Areas that are completely or almost completely without native species in the structure of their vegetation; i.e. areas that are cleared or 'parkland cleared' with their flora comprising weed or crop species with isolated native trees or shrubs.

Measuring vegetation condition for the Eremaean and Northern Botanical Provinces (Trudgen, 1991)

Appendix E. Photographs of the vegetation



Vegetation type P1: TeCEIPcAj. Vegetation condition "Poor" to "Very Poor" adjacent to previously cleared area.

Appendix F. Sources of information

F.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)
- Flood Risk (DPIRD-007)
- Groundwater Salinity Statewide (DWER-026)
- Hydrography, Linear (DWER-031)
- IBRA Vegetation Statistics
- Pre-European Vegetation Statistics
- 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
- Threatened Ecological Communities and Priority Ecological Communities (Buffers)

F.2. References

Biota (2022) Onslow Salt Potable Water Treatment Plant Biological Assessment. Report prepared for Onslow Salty Pty Ltd, by Biota Environmental Sciences, March 2022.

BoM (2022) Bureau of Meteorology Website – Climate Data Online, Leinster Aero. Bureau of Meteorology. http://www.bom.gov.au/climate/data/ (Accessed 1 June 2022).

Department of Environment Regulation (DER) (2014) A guide to the assessment of applications to clear native vegetation. Perth. Available from: <u>https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf</u>

Department of Planning, Lands and Heritage (DPLH) (2022) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <u>https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS</u> (Accessed 20 May 2022).

Department of Water and Environmental Regulation (DWER) (2021) Procedure: Native vegetation clearing permits. Joondalup. Available from: <u>Procedure - Native vegetation clearing permits (dwer.wa.gov.au)</u>

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) (2020) Technical Guidance – Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment. Available from: 2020.09.17 - EPA Technical Guidance - Vertebrate Fauna Surveys - Final.pdf 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

 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.
 Trudgen, M.E. (1991) Vegetation condition scale in National Trust (WA) 1993 Urban Bushland Policy. National Trust of Australia

(WA), Wildflower Society of WA (Inc.), and the Tree Society (Inc.), Perth. van Vreeswyk, A M, Leighton, K A, Payne, A L, and Hennig, P. (2004) *An inventory and condition survey of the Pilbara region, Western Australia.* Department of Primary Industries and Regional Development, Western Australia, Perth. Technical Bulletin 92.

4. Glossary

Acronyms:

BC Act BoM DAA DAFWA DAWE DBCA DER DMIRS DMP DOEE DOW DPAW DPIRD DPLH DRF DWER EP Act EPA EPBC Act GIS ha IBRA IUCN	Biodiversity Conservation Act 2016, Western Australia Bureau of Meteorology, Australian Government Department of Aboriginal Affairs, Western Australia (now DPLH) Department of Agriculture and Food, Western Australia (now DPIRD) Department of Agriculture, Water and the Environment, Australian Government Department of Biodiversity, Conservation and Attractions, Western Australia Department of Environment Regulation, Western Australia (now DWER) Department of Mines, Industry Regulation and Safety, Western Australia Department of Mines and Petroleum, Western Australia (now DMIRS) Department of the Environment and Energy (now DAWE) Department of the Environment and Energy (now DAWE) Department of Parks and Wildlife, Western Australia (now DBCA) Department of Parks and Wildlife, Western Australia (now DBCA) Department of Pimary Industries and Regional Development, Western Australia Declared Rare Flora (now known as Threatened Flora) Department of Water and Environmental Regulation, Western Australia Environmental Protection Act 1986, Western Australia Environmental Protection Authority, Western Australia Environmental Protection Authority, Western Australia Environmental Protection and Biodiversity Conservation Act 1999 (Federal Act) Geographical Information System Hectare (10,000 square metres) Interim Biogeographic Regionalisation for Australia International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
PEC RIWI Act TEC	Priority Ecological Community, Western Australia Rights in Water and Irrigation Act 1914, Western Australia Threatened Ecological Community

Definitions:

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

T <u>Threatened species:</u>

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.

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:

EN

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 <u>Priority species:</u>

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.