



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6184/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Redstone Minerals Pty Ltd

1.3. Property details

Property: Mining Lease 46/524
Miscellaneous Licence 46/113
Local Government Area: Shire of East Pilbara
Colloquial name: Redstone Minerals Pty Ltd

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
18.74		Mechanical Removal	Mineral Production and Access Tack

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 25 September 2014

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description Beard vegetation associations have been mapped for the whole of Western Australia. One Beard vegetation association is located within the application area (GIS Database):

Beard vegetation association 190: Hummock grasslands, sparse shrub steppe; *Acacia bivenosa* & *A. trachycarpa* over hard spinifex, *Triodia wiseana*, Very poor rocky country on gneiss (GIS Database).

Clearing Description Redstone Minerals Pty Ltd Project.
Redstone Minerals Pty Ltd proposes to clear up to 18.7 hectares of native vegetation within a total boundary of approximately 19.28 hectares, for the purposes of mineral production and access track. The project is located approximately 7 kilometres east of Nullagine, in the Shire of East Pilbara.

Vegetation Condition Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994);

To:

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

Comment There have been no flora or fauna surveys undertaken over the application area. The vegetation condition was inferred from aerial photography (GIS Database).

Redstone Minerals Pty Ltd proposes to undertake sand mining within Five Mile Creek using an existing track for access to the river. The vegetation within the application area is of a sparse nature, and any large trees will be avoided (Redstone Minerals Pty Ltd, 2013).

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 is not likely to be at variance to this Principle**
The application area occurs within the Chichester subregion of the Pilbara Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). This subregion is characterised by plains supporting a shrub steppe of *Acacia inaequilatera* over *Triodia wiseana* hummock grasslands, while *Eucalyptus leucophloia* tree steppes occur on the ranges (CALM, 2002).

There was no flora and vegetation survey conducted over the application area or the surrounding region. A search of the Department of Parks and Wildlife's Threatened and Priority Flora databases revealed no records of Threatened Flora species, and three Priority Flora species within a 5 kilometre radius of the application area; *Acacia aphanoclada* (Priority 1), *Acacia fecunda* (Priority 3), *Eucalyptus rowleyi* (Priority 3) (DPaW, 2014a). The Priority Flora species *Acacia aphanoclada* is found in rocky hills, ridges and rises habitat which the

application area does not contain (Western Australian Herbarium, 2014; GIS Database). The species *Eucalyptus rowleyi* is a tall Mallee reaching 3 metres in height (Western Australian Herbarium, 2014). Redstone Minerals Pty Ltd (2013) has stated that no trees will be cleared within the application area. The species *Acacia fecunda* can be found along shallow creeks and drainage lines (Western Australian Herbarium, 2014). Given that the proposed clearing is to maintain an existing access track and clear the riparian vegetation in the middle of the creek to access the sand, it is unlikely that the clearing of 18.7 hectares of sparse native vegetation will significantly impact the conservation significance of this species.

No known Threatened Ecological Communities are recorded within the application area (GIS Database). The application area sits within the buffer of the Priority Ecological Community (PEC) 'Stony saline plains of the Mosquito Land System' (Priority 3) (GIS Database). Advice from DPaW (2014b) suggests that the PEC is unlikely to be present within the application area and that the proposed activities will not directly impact the PEC.

Aerial imagery suggests a sparse nature of the vegetation within the application area, which also appears to be common within the local area and regional area (GIS Database). Besides the potential riparian habitat associated with Five Mile Creek, aerial imagery does not show potential significant faunal habitat within the application area (GIS Database).

Weeds have the potential to significantly change the dynamics of a natural ecosystem and lower the biodiversity of an area. Potential impacts to the biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

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

Methodology CALM (2002)
DPaW (2014a)
DPaW (2014b)
Redstone Minerals (2013)
Western Australian Herbarium (2014)
GIS Database:
- IBRA WA (Regions - Subregions)
- Nullagine 50cm Orthomosaic - Landgate 2007
- Pre-European vegetation
- Threatened Ecological Sites Buffered

(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**

There was no fauna survey conducted over the application area or the surrounding region. The application area is located within Five Mile Creek and includes an existing access track to the river bank. The habitat associated with the Five Mile Creek area is of good habitat value and the access track is in a degraded condition. Aerial imagery suggests that the faunal habitat present within the application area appears to be abundant within the local area. The Five Mile Creek fauna habitat extends for approximately 16 kilometres, with the proposed clearing comprising 1.5 kilometres of the Five Mile Creek fauna habitat (GIS Database). Within Five Mile Creek, the proposed clearing only proposes to remove sparse vegetation within the creek bed. Vegetation along the banks of the creek are not proposed to be cleared. Given the sparse nature of the vegetation within the application area and the availability of the similar habitat appearing in a better condition outside the application area (GIS Database), the proposed clearing is not likely to impact the potential significance of the Five Mile Creek fauna habitat.

There are four conservation significant species listed as Threatened under the *Environment Protection and Biodiversity Conservation Act 1999* or protected under Western Australian legislation (*Wildlife Conservation Act, 1950*), that may potentially occur within the application area (DPaW, 2014a);

- Orange Leaf nosed-bat (*Rhinonicteris aurantia*) (EPBC Act – Vulnerable, WC Act – Vulnerable);
- Bilby (*Macrotis lagotis*) (EPBC Act – Vulnerable, WC Act – Schedule 1);
- Australian Bustard (*Ardeotis australis*) (DEC – Priority 4); and
- Rainbow Bee-eater (*Merops ornatus*) (EPBC Act - Migratory species; JAMBA, CAMBA).

The Rainbow Bee-eater is seasonally widespread and utilises both natural and degraded habitats. This bird could potentially use the application area and adjoining areas for foraging, roosting and possibly breeding but they would not be specifically attracted to the site (GIS Database). The Australian Bustard may use the application area for foraging as part of a larger territory area and are considered highly mobile. Based on aerial imagery, there is no suitable habitat for the Orange Leaf nosed-bat (GIS Database). The sandy river flats adjacent to Five Mile Creek may provide suitable terrain for burrows for the Bilby (DPaW, 2014b; GIS Database). An exclusion zone of 10 metres from the beginning of the Five Mile creek bank extending into the Five Mile Creek has been implemented to avoid potential impact on the Bilby. Although fauna of conservation significance may forage in the area, the application area is unlikely to represent significant habitat for any of these species.

The proposed clearing to upgrade an existing track and to clear very sparse vegetation within the creek bed is unlikely to have any significant impacts on the available fauna habitat at a local or regional scale.

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

Methodology DPaW (2014a)
 DPaW (2014b)
 Keighery (1994)
 GIS Database:
 - Nullagine 50cm Orthomosaic - Landgate 2007

(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**
 According to available databases, there are no known records of Threatened Flora within the application area (GIS Database). A search of the Department of Parks and Wildlife's Threatened and Priority Flora databases identified no Threatened Flora species as occurring within a 5 kilometre radius of the application area (DPaW, 2014a).

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

Methodology DPaW (2014a)
 GIS Database:
 - Threatened and Priority Flora List

(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**
 A search of the available databases showed that there are no known Threatened Ecological Communities situated within 150 kilometres of 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:
 - Threatened Ecological Sites Buffered

(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 IBRA bioregion (GIS Database). The vegetation within the application area is recorded as:

Beard vegetation association 190: Hummock grasslands, sparse shrub steppe; *Acacia bivenosa* & *A. trachycarpa* over hard spinifex, *Triodia wiseana*, Very poor rocky country on gneiss (GIS Database).

According to the Government of Western Australia (2013), Beard vegetation association 190 retains approximately 99% of its pre-European extent. The area proposed to be cleared is not a significant remnant of native vegetation.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in IUCN Class I-IV Reserves

IBRA Bioregion - Pilbara	17,808,657	17,733,584	~99.58	Least Concern	6.34
Beard vegetation associations - State					
190	169,200	169,051	-	Least Concern	-
Beard vegetation associations - Bioregion					
190	169,200	169,051	~99.91	Least Concern	-

* Government of Western Australia (2013)

** 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 (2013)
GIS Database:
- IBRA WA (regions - subregions)
- 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 may be at variance to this Principle

The application area sits within Five Mile Creek which is an ephemeral watercourse approximately 16 kilometres long that has a wide, well defined sandy drainage channel (GIS Database). Aerial imagery suggests the sparse presence of riparian vegetation associated with the watercourse. The proposed clearing is to enable the proponent to undertake sand extraction from the creek bed, along a small section (1.5 kilometres) of Five Mile Creek, therefore impacting on present riparian vegetation. Redstone Minerals Pty Ltd (2013) state that mining activities will not occur within the area defined as the 'drip-line' of the vegetation growing on the creek banks and a buffer of at least 2 meters will be employed from the banks of the creek (other than areas where access ramps are located). Given the sparse nature of vegetation within the application area and the avoidance of the creek banks, it is unlikely that the proposed clearing will significantly impact the Five Mile Creek.

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

Methodology Redstone Minerals Pty Ltd (2013)
GIS Database:
- Geodata, Lakes
- Hydrography, Linear
- Nullagine 50cm Orthomosaic - Landgate 2007

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

Comments Proposal may be at variance to this Principle

The application area intersects the Mosquito land system (GIS Database). The Mosquito Land System is characterised by stony plains and prominent ridges of schist and other metamorphic rocks supporting hard spinifex grasslands (Van Vreeswyk et al., 2004). Most of the system has low susceptibility to erosion except for some drainage floor units which are moderately susceptible if vegetation cover is lost (Van Vreeswyk et al., 2004). Potential impacts from land degradation as a result of the proposed clearing may be minimised by the implementation of a staged clearing condition.

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

Methodology Van Vreeswyk et al (2004)
GIS Database:
- Rangeland Land System Mapping

(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

The application area is not located within any conservation area (GIS Database). The nearest conservation area is Karlamilyi National Park, located approximately 158 kilometres south-east of the application area (GIS Database).

Given the distance of the application area from Karlamilyi National Park, the proposed clearing is not likely to provide a significant ecological linkage or fauna movement corridor and is not likely to impact the environmental values of the conservation area.

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

Methodology GIS Database:
- DEC 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

The application area is not located within a Public Drinking Water Source Area (GIS Database). The application area is located within the proclaimed Pilbara groundwater area under the *Rights in Water and Irrigation Act 1914* (GIS Database). Any groundwater extraction and/or taking or diversion of surface water for the purposes other than domestic and/or stock watering is subject to licence by the Department of Water.

The application area is situated within Five Mile Creek which is an ephemeral water course subject to inundation (GIS Database). These drainage tracts are dry for several periods of the year and only flow and hold surface water following significant rainfall events (CALM, 2002). The proposed clearing is unlikely to result in any significant impact to surface water quality.

The application area has a groundwater salinity that is saline (7,000 to 14,000 milligrams/Litre Total Dissolved solids (TDS)) (GIS Database). With high annual evaporation rates and low annual rainfall, there is little recharge into regional groundwater. The proposed clearing is unlikely to further deteriorate the quality of underground water (GIS Database).

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

Methodology CALM (2002)
GIS Database:
- Geodata, Lakes
- Groundwater Salinity, Statewide
- Hydrography, Linear
- Public Drinking Water Source Areas
- RIWI Act, Groundwater 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 application area experiences a semi-desert-tropical climate, with an annual average rainfall of approximately 374.2 millimetres per year (CALM, 2002; BoM, 2014). Based on an average annual evaporation rate of 3,200 - 3,600 millimetres (BoM, 2014), any surface water resulting from rainfall events is likely to be relatively short lived.

Given the location of most of the application area within the creek bed, and the size of the area to be cleared (18.7 hectares) compared to the size of the Nullagine River catchment area (722,582 hectares) (GIS Database) it is not likely that the proposed clearing will lead to an appreciable increase in run off, and subsequently cause or exacerbate the incidence or intensity of flooding.

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

Methodology BoM (2014)
CALM (2002)
GIS Database:
- Hydrographic Catchments - Catchments

Planning instrument, Native Title, Previous EPA decision or other matter.

Comments

There is one Native Title claim over the area under application (GIS Database). The claim WC1999/008 has been registered with the National Native Title Tribunal 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 no registered Aboriginal Sites of Significance within the application area (GIS Database). 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 Environment Regulation, Department of Parks and Wildlife and the Department of Water, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

The clearing permit application was advertised on 28 July 2014 by the Department of Mines and Petroleum inviting submissions from the public. One submission was received raising concerns about the cumulative impacts of clearing. This is addressed in Principle (e).

- Methodology** GIS Database:
- Aboriginal Sites of Significance
 - Native Title Claims - Registered with the NNTT
 - Native Title Claims - Filed at the Federal Court
 - Native Title Claims - Determined by the Federal Court

4. References

- BoM (2014) Climate Statistics for Australian Locations. A Search for Climate Statistics for Redmont, Australian Government Bureau of Meteorology, viewed 10 September 2014, <http://reg.bom.gov.au/climate/averages/tables/cw_004106.shtml>.
- 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.
- Department of Parks and Wildlife (DPaW) (2014a) NatureMap Department of Parks and Wildlife, viewed 15 August 2014 <<http://naturemap.dec.wa.gov.au>>.
- Department of Parks and Wildlife (DPaW) (2014b) Species and Communities Branch - CPS 6184/1 Request for Advice. Internal document, 9 September 2014.
- Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, Perth.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Redstone Minerals Pty Ltd (2013) Mining Proposal for Sand Extraction - M46/524 'Five Mile Project'. Internal Document, May 2013.
- Van Vreeswyk, A.M.E., Payne, A.L., Leighton, K.A. and Hennig, P. (2004) Technical Bulletin - An Inventory and Condition Survey of the Pilbara Region, Western Australia, No. 92. Department of Agriculture, Government of Western Australia, Perth, Western Australia.
- Western Australian Herbarium (2014) FloraBase - The Western Australian Flora. Department of Parks and Wildlife. <<http://florabase.dpaw.wa.gov.au/>> Accessed 10 September 2014.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
CALM	Department of Conservation and Land Management (now DEC), Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia
DEH	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
DEP	Department of Environment Protection (now DEC), Western Australia
DIA	Department of Indigenous Affairs
DLI	Department of Land Information, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DoE	Department of Environment (now DEC), Western Australia
DoIR	Department of Industry and Resources (now DMP), Western Australia
DOLA	Department of Land Administration, Western Australia
DoW	Department of Water
EP Act	Environmental Protection Act 1986, 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
RIWI Act	Rights in Water and Irrigation Act 1914, Western Australia
s.17	Section 17 of the Environment Protection Act 1986, Western Australia
TEC	Threatened Ecological Community

Definitions:

{Atkins, K (2005). *Declared rare and priority flora list for Western Australia, 22 February 2005*. Department of Conservation and

Land Management, Como, Western Australia} :-

- P1 Priority One - Poorly Known taxa:** taxa which are known from one or a few (generally <5) populations which are under threat, either due to small population size, or being on lands under immediate threat, e.g. road verges, urban areas, farmland, active mineral leases, etc., or the plants are under threat, e.g. from disease, grazing by feral animals, etc. May include taxa with threatened populations on protected lands. Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
- P2 Priority Two - Poorly Known taxa:** taxa which are known from one or a few (generally <5) populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
- P3 Priority Three - Poorly Known taxa:** taxa which are known from several populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in need of further survey.
- P4 Priority Four – Rare taxa:** taxa which are considered to have been adequately surveyed and which, whilst being rare (in Australia), are not currently threatened by any identifiable factors. These taxa require monitoring every 5–10 years.
- R Declared Rare Flora – Extant taxa (= Threatened Flora = Endangered + Vulnerable):** taxa which have been adequately searched for, and are deemed to be in the wild either rare, in danger of extinction, or otherwise in need of special protection, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.
- X Declared Rare Flora - Presumed Extinct taxa:** taxa which have not been collected, or otherwise verified, over the past 50 years despite thorough searching, or of which all known wild populations have been destroyed more recently, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

{Wildlife Conservation (Specially Protected Fauna) Notice 2005} [Wildlife Conservation Act 1950] :-

- Schedule 1 Schedule 1 – Fauna that is rare or likely to become extinct:** being fauna that is rare or likely to become extinct, are declared to be fauna that is need of special protection.
- Schedule 2 Schedule 2 – Fauna that is presumed to be extinct:** being fauna that is presumed to be extinct, are declared to be fauna that is need of special protection.
- Schedule 3 Schedule 3 – Birds protected under an international agreement:** being birds that are subject to an agreement between the governments of Australia and Japan relating to the protection of migratory birds and birds in danger of extinction, are declared to be fauna that is need of special protection.
- Schedule 4 Schedule 4 – Other specially protected fauna:** being fauna that is declared to be fauna that is in need of special protection, otherwise than for the reasons mentioned in Schedules 1, 2 or 3.

{CALM (2005). Priority Codes for Fauna. Department of Conservation and Land Management, Como, Western Australia} :-

- P1 Priority One: Taxa with few, poorly known populations on threatened lands:** Taxa which are known from few specimens or sight records from one or a few localities on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, active mineral leases. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P2 Priority Two: Taxa with few, poorly known populations on conservation lands:** Taxa which are known from few specimens or sight records from one or a few localities on lands not under immediate threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P3 Priority Three: Taxa with several, poorly known populations, some on conservation lands:** Taxa which are known from few specimens or sight records from several localities, some of which are on lands not under immediate threat of habitat destruction or degradation. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P4 Priority Four: Taxa in need of monitoring:** Taxa which are considered to have been adequately surveyed, or for which sufficient knowledge is available, and which are considered not currently threatened or in need of special protection, but could be if present circumstances change. These taxa are usually represented on conservation lands.
- P5 Priority Five: Taxa in need of monitoring:** Taxa which are not considered threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

Categories of threatened species (Environment Protection and Biodiversity Conservation Act 1999)

- EX Extinct:** A native species for which there is no reasonable doubt that the last member of the species has died.
- EX(W) Extinct in the wild:** A native species which:
- (a) is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or
 - (b) has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.

- CR** **Critically Endangered:** A native species which is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
- EN** **Endangered:** A native species which:
(a) is not critically endangered; and
(b) is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.
- VU** **Vulnerable:** A native species which:
(a) is not critically endangered or endangered; and
(b) is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
- CD** **Conservation Dependent:** A native species which is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.