



1. Application details

1.1. Permit application details

Permit application No.: 2128/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Department of the Environment and Water Resources

1.3. Property details

Property: UNALLOCATED CROWN LAND (CHRISTMAS ISLAND 6798)

Local Government Area: Shire Of Christmas Island

Colloquial name: ML 111 Christmas Island

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.26		Mechanical Removal	Restoration

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
The clearing of the area under application is to gain access to stockpile soil for its distribution in nearby rehabilitation earthworks. The vegetation within the area to be cleared is regrowth vegetation predominately of low lying ferns and weed species. Photographs (DEWR, 2007) indicated that the vegetation condition is degraded.	The vegetation within the area to be clearing is regrowth vegetation predominately of low lying ferns and weed species. Photographs (DEWR 2007) indicated that the vegetation condition is degraded.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Vegetation condition was determined from photographs (DEWR, 2007).

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 at variance to this Principle

The purpose of clearing stockpile 21D on ML111 is to gain access to the soil for its redistribution in nearby rehabilitation earthworks. The area proposed for clearing is 0.26ha in the north eastern corner of ML111 on stockpile 21D, which is located with in the centre of a previously cleared area. The vegetation within the proposed clearing area consists predominately of ferns and woody weed species (0.21ha), with 0.05ha of young native trees and ferns. The vegetation ages from approximately 1-15 years (DEWR, 2007).

The vegetation condition is classified as degraded (Keighery, 1994) and given the previous disturbance to the site the proposed clearing area is not considered to hold high biological diversity and therefore is not at variance to this principle.

Methodology

Keighery (1994)

DEWR (2007)

GIS: Christmas Island 60cm Orthomosaic - Landsgate06 (Image)

(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

Department of Environment and Water Resources (DEWR) propose to clear 0.26ha of predominately fast regenerating low lying ferns and weedy vegetation. From photographs supplied by DEWR (2007), the area the area surrounding the application has been intensely cleared. Furthermore the area under application contains

degraded vegetation ranging from approximately 1-15 years regrowth, with little habitat for rainforest fauna, such as the Abbott's Booby. From information in the National Recovery Plan for the Abbott's Booby (*Papsula abbotti*) 2004, the proposed clearing is unlikely to pose a threat to the breeding sites of the endangered species as most nests are known to occur in tall plateau forest not secondary regrowth areas.

As the vegetation on ML111 stockpile 21D consists highly of secondary regrowth and unlikely to be necessary as a significant habitat, it is not likely the proposed clearing area is at variance to this principle.

Methodology DEWR (2007)
Abbott's Booby (2004)
GIS: Christmas Island 60cm Orthomosaic - Landsgate06 (Image)

(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

DEWR propose to clear 0.26ha of native vegetation for rehabilitation purposes. From photographs (DEWR 2007), the area under application contains degraded vegetation dominated by low lying ferns and weed species. Fast regenerating native vegetation dominates the upper storey, and have established in unnatural proximity to each other.

Advice from Parks Australia North (2007) indicates that many of the rare species would be unlikely to exist on severely disturbed areas. However, some may be found in undisturbed forest near the margins with disturbed areas.

Due to the disturbed and fragmented nature of the application area it would be unlikely that the native vegetation includes, or is necessary for, the continued existence of rare flora.

Methodology DEWR (2007)
PAN (2007)
GIS: Christmas Island 60cm Orthomosaic - Landsgate06 (Image)

(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 at variance to this Principle

There are no listed Threatened Ecological Communities on Christmas Island (EPBC ACT TEC List 2007), therefore the proposed clearing is not at variance to this principle.

Methodology EPBC Act TEC list (2007)

(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 proposed clearing occurs in an area previously cleared, where its original forest has been replaced by ferns and weed species. Approximately 75% of Christmas Island is still covered with natural vegetation and 84% of this (63% of total Island area) is protected within National Park (Goshawk, 2007).

Given the degraded condition of the vegetation under application and the high remaining extent of native vegetation on Christmas Island the proposed clearing is not considered to be significant in an area that has been extensively cleared and is therefore no at variance to this clearing principle.

Methodology Goshawk (2007)

(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 not likely to be at variance to this Principle

The proposed clearing area is not adjacent to wetlands or watercourses as the clearing is centralised within the plateau away from waterfalls and springs located towards the edges of the Island. Therefore the proposal is not likely to be at variance to this principle.

Methodology GIS: Christmas Island 60cm Orthomosaic - Landsgate06 (Image)

(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 interior of Christmas Island is slightly undulating plateau, from about 160-360m above sea level. The area under application is situated on the plateau with relatively little relief (Environment Australia, 2002). Therefore, due to the topography of the clearing site, the small size and disturbed nature of the proposed clearing area, together with the proposed use of the stockpile soil for rehabilitation in a nearby site, the clearing is not likely to cause appreciable land degradation.

Methodology Environment Australia (2002)

(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 proposed clearing site lies adjacent to National Park and Primary rainforest (GeoScience, 2003). The purpose of clearing stockpile 21D is to gain access to the soil for use in nearby rehabilitation earthworks. As the vegetation within the stockpile is degraded and contains a high proportion of weed species, the clearing is unlikely to impact on the environmental values of nearby conservation areas.

Methodology GeoScience (2003)

(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 site is centrally located on the plateau away from all surface water located on Christmas Island.

Groundwater flows along the limestone interface with basalt layer. Soils are transmissive. The depth to water and water quality in the proposed clearing area is unknown (Environment Australia, 2002).

Given the location, the small size and disturbed nature of the proposed clearing area, the clearing of native vegetation for rehabilitation purposes is not likely to be at variance to this principle.

Methodology Environment Australia (2002)
GIS: Christmas Island 60cm Orthomosaic - Landsgate06 (Image)

(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

Given the small (0.26ha) and disturbed nature of the proposed clearing area, and that the type of regrowth vegetation is predominately ferns (pteridophytes) and weeds with diminutive root systems, the clearing of native vegetation is not likely to cause, or exacerbate, the incident or intensity of flooding.

Methodology GIS: Christmas Island 60cm Orthomosaic - Landsgate06 (Image)

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

Comments

There are no Aboriginal Sites of Significance or Native title Claims over the area.

EPA does not make decisions on Christmas Island.

EPBC Act applies.

Methodology

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Restoration	Mechanical Removal	0.26	The assessable criteria have been addressed, and the proposal is not likely to be at variance to all principles.	

5. References

- Department of Environment and Heritage. 2004. National Recovery Plan for the Abbott's Booby Papsaula abbotti, Department of the Environment and heritage, Canberra.
- Department of Environment and Water Resources. 2007. Photographs of proposed clearing areas.
- Environment Australia. 2002. Christmas Island National Park Management Plan. Commonwealth of Australia. Canberra.
- Environmental Protection and Biodiversity Conservation Act 1999 TEC list, sited at <http://www.environment.gov.au/cgi-bin/sprat/public/publiclookupcommunities.pl>. Last updated 21 June 2007.
- GeoScience. 2003. Register of National Estates. Cited at http://www.ga.gov.au/map/christmas/metadata/nat_est.html
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- PAN. 2007. Advice from Parks Australia North

6. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management
DAWA	Department of Agriculture
DEP	Department of Environmental Protection (now DoE)
DoE	Department of Environment
DoIR	Department of Industry and Resources
DRF	Declared Rare Flora
EPP	Environmental Protection Policy
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
TEC	Threatened Ecological Community
WRC	Water and Rivers Commission (now DoE)