1. Application details

1.1. Permit application details

Permit application No.: 1329/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Ed Hauck Branch Manager Department of Water

1.3. Property details

Property: SWAN LOCATION 5610 (YEAL 6503)
Local Government Area: Shire Of Gingin
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.0045		Cutting	Bore construction

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
Beard Vegetation Association 37: Shrublands; teatree thicket (Shepherd et al 2001, Hopkins et al 2001)	The area under application comprises 0.0045ha which is necessary to enable access for a drill rig to drill a water monitoring bore near Lake Bindiar.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	The vegetation condition of excellent was given based on photos and supporting documentation provided by the proponent (Trim Ref: ED925 & ED926) and GIS database Swan Coastal Plain North 40cm Orthomosaic - DLI 05
Heddle vegetation complex - BASSENDEAN COMPLEX - NORTH : Vegetation ranges from a low open forest and low open woodland of Banksia species Eucalyptus. todtiana to low woodland of Melaleuca species and sedgelands which occupy the moister sites (Heddle et al 1980).	The proponent intends to remove only as much vegetation as necessary to allow access for the truck mounted drill rig. Large trees, particularly groundwater dependent species such as Eucalyptus rudis and Banksia ilicifolia will be avoided. The vegetation will be pruned and removed by the Yanchep Two rocks Green Corps team using loppers, pruning saws and by hand. Any viable seeds on pruned or removed vegetation will be scattered in the general area. The vegetation surrounding Lake Bindiar is primarily made up of Low open Banksia spp. and Eucalyptus spp. woodland. Photos of the area show Melaleuca thickets approximately 2m high. (Trim Ref: ED925)		

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 area under application is located within the Lake Bindiar system in DEC managed State Forest 65.

However the area under application is 0.0045ha, which is necessary to provide access for a drill rig to drill a water monitoring bore near Lake Bindiar. The vegetation is made up of Melaleuca scrub on leached sandy soils. Large trees, particularly groundwater dependent species such as Eucaluptus rudis and Banksia ilicifolia will be avoided. During the clearing process it is expected that the vegetation will eventually regenerate.
It is considered that the area to be cleared is not large enough to compromise the biodiversity in the local area.

Methodology Information from Proponent (Trim Ref: ED 925 & ED 926)
GIS Database:
- Swan Coastal Plain North 40cm Orthomosaic
- DLI 05- Soils, Statewide - DA 11/99
- Clearing Regulations - Environmentally Sensitive Areas - DOE 30/5/05

(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 vegetation under application is primarily made up of Melaleuca scrub on leached sandy soils. The proponent has stipulated that any large trees will either be avoided or pruned. Given the size of the area under application (0.0045ha) it is unlikely that clearing will have any adverse effects on fauna within the local area.

Methodology Information from Proponent (Trim Ref: ED 925 & ED 926)
GIS Database:
- Swan Coastal Plain North 40cm Orthomosaic
- DLI 05- Soils, Statewide - DA 11/99

(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**
No Declared Rare Flora (DRF) have been recorded in or found within a 5km radius of the area under application. Given the small size of the application (0.0045ha) it is unlikely that the area as proposed will be at variance to this principle.

Methodology GIS Database:
- Swan Coastal Plain North 40cm Orthomosaic - DLI 05
- Declared Rare and Priority Flora List - CALM 01/07/05

(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 Threatened Ecological Communities (TECs) recorded within the area under application or within close proximity for the proposed clearing. Given the above and the small size of the area under application, the clearing is unlikely to be at variance to this Principle.

Methodology GIS Database:
- Swan Coastal Plain North 40cm Orthomosaic - DLI 05
- Threatened Ecological Communities - CALM 12/4/05

(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 likely to be at variance to this Principle**
The vegetation proposed to be cleared consists of Heddle vegetation complex Bassendean Complex ý North (Heddle et al 1980) and Beard vegetation association 37 (Shepherd et al 2001, Hopkins et al 2001). Heddle vegetation complex Bassendean Complex - North has approximately 72% (53,384ha) remaining of its pre-European extent (Heddle et al 1980) and Beard vegetation association 37 has approximately 55.9% (24,725ha) remaining (Shepherd et al 2001, Hopkins et al 2001). It is considered that the small area under application (0.0045ha) is not a significant remnant of these vegetation associations. Therefore the clearing as proposed is not likely to be at variance to this Principle.

Methodology Heddle et al (1980)
Shepherd et al (2001)
Hopkins et al (2001)
GIS Database:
- Swan Coastal Plain North 40cm Orthomosaic - DLI 05
- Pre-European Vegetation - DA 01/01
- Heddle Vegetation Complexes - DEP 21/06/95

(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

Although the proposed clearing is to be carried out within the seasonal Lake Bindiar system (Sarti 1988), it is considered that the removal of the small area under application (0.0045ha) would not have a significant impact on the lake vegetation system.

Methodology

Neil Sarti (1988) TRIM Ref: ED925
GIS Database:- EPP, Lakes - DEP 1/12/92
- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DOE

(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 proposed area is within a high risk Acid Sulphate Soils (ASS) or Potential Acid Sulphate Soils (PASS) zone where there is potential for ASS to occur less than 3m from the surface. The proponent has indicated that all care will be taken to ensure only the required vegetation to allow access to the drill rig will be removed. As no large trees are to be removed, it is unlikely that any ASS or PASS will be exposed.

It is considered that the small scale of the proposed clearing (0.045ha) is not of sufficient size to cause appreciable land degradation. Therefore clearing as proposed is unlikely to be at variance to this principle.

Methodology

Information from Proponent (Trim Ref: ED 925 & ED 926)
GIS Database:
- Swan Coastal Plain North 40cm Orthomosaic - DLI 05
- Acid Sulfate Soil Risk Map, SCP - DOE 04/11/04

(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 area under application lies within State Forest 65: While the Biodiversity Coordination Section of DEC have advised that they have no objection to the clearing (Trim ref: DOC 2463), it is the proponents responsibility to ensure that all necessary approvals are in place.
The proposed clearing is to allow a drill rig to sink a bore that will monitor the groundwater levels of the lake system. It is considered that the removal of a small area of vegetation (0.0045ha) is unlikely to have significant long term impacts on the conservation area.

Methodology

DEC authorisation to enter DEC managed land (Trim Ref DOC2463)
GIS Database:
- Swan Coastal Plain North 40cm Orthomosaic - DLI 05
- CALM Managed Lands and Waters - CALM 01/08/04
- Bush Forever - MFP 07/01

(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 area under application is within the Lake Bindiar system. Lake Bindiar is a seasonal wetland. The water level relies heavily on the height of the underground water table and the degree of drainage from surrounding areas (Sarti 1988). The area under application consists of leached, well drained, sandy soils. Given that the area under application is only 0.0045ha it is unlikely that the clearing will be at variance to this principle.

Methodology

Neil Sarti (1988) TRIM Ref: ED925
GIS Database:
- EPP, Lakes - DEP 1/12/92
- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DOE

(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 proposed clearing is to allow the sinking of a bore to monitor the groundwater levels of the lake system and surrounding areas. It is unlikely that clearing on the scale of the proposed application (0.0045ha) will have any significant impacts on the incidence or intensity of flooding.

Methodology

GIS Database:
- Swan Coastal Plain North 40cm Orthomosaic - DLI 05

- EPP, Lakes - DEP 1/12/92
- Geomorphic Wetlands (Mgt Categories),
- Swan Coastal Plain - DOE

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

Comments

Legal access has been granted by DEC to allow the applicant to carry out the proposed works (Trim ref: DOC2463). It is the Department's view that the grant of the clearing permit is a secondary approval that removes the EP Act's prohibition on the applicant exercising a right to clear native vegetation that arises pursuant to the authorisation from DEC. Accordingly, it is the Department's view that the CEO is not required to comply with future act procedures under the Native Title Act 1993.

There is no other RIWI Act Licence, Works Approval or EP Act Licence that will affect the area that has been applied to clear

Methodology

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Bore construction	Cutting	0.0045	**Grant**	All the assessable criteria have been addressed and the proposal is not likely to be at variance to the Clearing Principles. The assessing officer recommends that the permit be granted.

5. References

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.

Heddle, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.

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

Sarti, Neil (1988) A report on Lake Bindiar and Yeal Swamp, Northern Swan Coastal Plain. Curtin University of Technology, Bentley, Western Australia

Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

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)