



1. Application details

1.1. Permit application details

Permit application No.: 3255/1
 Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Oakajee Port and Rail Pty Ltd

1.3. Property details

Property:
 LOT 12712 ON PLAN 35751 (NUNIERRA 6630)
 LOT 11802 ON PLAN 26343 (House No. 469 WANDINA NUNIERRA 6630)
 LOT 11804 ON PLAN 238483 (SOUTH MURCHISON 6635)
 LOT 11810 ON PLAN 220399 (WOOLGORONG 6630)
 LOT 12630 ON PLAN 28859 (SOUTH MURCHISON 6635)
 LOT 11803 ON PLAN 28258 (SOUTH MURCHISON 6635)
 LOT 11811 ON PLAN 220764 (SOUTH MURCHISON 6635)
 LOT 91 ON PLAN 220764 (SOUTH MURCHISON 6635)
 LOT 11812 ON PLAN 221150 (YALGOO 6635)
 LOT 94 ON PLAN 220763 (SOUTH MURCHISON 6635)

Local Government Area:

Colloquial name:

1.4. Application

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

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
Mapped Beard (1980) vegetation associations:	The application is for the clearing of 1.44ha within sites across the midwest region for geotechnical investigations and associated tracks. The vegetation condition ranges from excellent to degraded (Keighery 1994), with some disturbance from grazing at most sites (OPR 2009).	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	The vegetation condition and description was determined from vegetation and flora surveys supplied by the proponent (OPR 2009).
18: Low woodland; mulga (Acacia aneura)			
35: Shrublands; jam scrub with scattered York gum			
40: Shrublands; acacia scrub, various species			
326: Low woodland over scrub; mulga over bowgada & minnieritchie scrub			
372: Mosaic: Shrublands; scrub-heath on deep sandy flats / Shrublands; thicket, acacia-casuarina alliance			
687: Shrublands; bowgada & jam scrub with scattered Allocasuarina heugelliana & York gum			
1125: Succulent steppe			

with scrub; Acacia victoriae
& snakewood over
salbush & bluebush

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 is for the clearing of 1.44ha of native vegetation, within a 4km wide, 150km long corridor, for geotechnical investigations and associated access tracks. The vegetation ranges from excellent to degraded (Keighery 1994) condition, disturbance caused by grazing and weeds is apparent in many areas under application.

The local area retains nearly 100% of its pre-European vegetation, and the Yalgoo and Murchison IBRA Bioregions are both well vegetated (Shepherd 2007).

Two of the areas under application fall within the 12500m buffer of the Tallering Peak Priority One Ecological Community. 1.4km and 2km north from areas under application.

Given the vegetation remaining within the local area and the small (1.44ha) size of the proposed clearing area this proposal is not like to have a locally significant level of biological diversity, and the clearing as proposed is not likely to be at variance to this principle.

Methodology Shepherd (2007)
Keighery (1994)

GIS database:

- CALM Managed Lands and Waters - CALM 01/06/05
- SAC Biodatasets - accessed 27 July 09
- Declared Rare and Priority Flora List - CALM 13/08/03
- Pre European Vegetation - DA 01/01
- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
- NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(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 following rare fauna species have been identified as occurring within the corridor within which the clearing will occur:

Western Spiny-tailed Skink (*Egernia stokesii badia*)
Gilled Slender Bluetongue (*Cyclodomorphus branchialis*)
Malleefowl (*Lepioa ocellata*)
Rainbow Bee-eater (*Merops ornatus*)

The vegetation types under application are well represented within the Yalgoo and Murchison bioregions, with close to 100% of the pre-European extent remaining (Shepherd 2007).

A survey (OPR, 2009) conducted by the applicant identified Western Spiny-tailed Skink and Malleefowl habitat within the surveyed corridor. The applicant has applied for areas to clear within this corridor where habitat for these species was not identified.

Given that the corridor within which the application area exists contains habitat for the Western Spiny-tailed Skink and Malleefowl the clearing as proposed may be significant habitat for fauna indigenous to Western Australia.

Fauna management conditions will be placed on the permit to mitigate the potential for clearing to impact on significant habitat for these conservation significant fauna.

Methodology Shepherd (2007)

GIS database:

- CALM Managed Lands and Waters - CALM 01/06/05
- SAC Biodatasets - accessed 3 September 09
- Hydrography linear - DOW 13/7/06
- Hydrography linear (hierarchy) - DoW 13/7/06

(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 rare flora has been recorded of within 30 km radius of the area under application. Additionally, no rare flora species were identified during flora surveys conducted throughout the proposed clearing areas (OPR 2009). The clearing as proposed is therefore not likely to be at variance to this principle.

Methodology OPR (2009)

GIS database:

- Declared Rare and Priority Flora List - CALM 13/08/03
- Pre European Vegetation - DA 01/01
- SAC Biodatasets - accessed 3 september 09
- Soils, Statewide DA 11/99

(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

No known threatened ecological communities have been recorded within the immediate proximity of the area under application. The clearing as proposed is therefore not likely to be at variance to this principle.

Methodology GIS Database:

- SAC Biodatasets - accessed 3 September 09
- Pre European Vegetation - DA 01/01
- Soils, Statewide DA 11/99

(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

Most of the Beard (1980) vegetation associations mapped within the application area are well represented in the Murchison bioregion, with close to 100% of the pre-European extent remaining.

One bore point is mapped as occurring within Beard Vegetation Association 687, which retains 29.70% of its pre-European extent within the Yalgoo bioregion, and 17.80% across the state (Shepherd 2007). The full extent of clearing within this vegetation association is not likely to be greater than 0.01ha, and as such the impact is not likely to be significant.

The clearing as proposed is therefore not likely to be at variance to this principle.

Methodology Shepherd (2007)

GIS Databases:

- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- Local Government Authorities - DLI 8/07/04
- Pre European Vegetation - DA 01/01
- SAC Biodatasets - accessed 3 September 09
- NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(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

The application intersects a minor non-perennial significant stream (Bangemall Creek). The proposed clearing is therefore considered to contain vegetation growing in association with a watercourse and is therefore at variance to this principle. However, given the clearing size at this site is approximately 0.29ha (OPR 2009) the likely impact to the riparian vegetation is small. A permit to obstruct or interfere with bed and banks has been granted by the Department of Water for this site.

Methodology OPR (2009)

GIS Databases:

- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
- Hydrography linear - DOW 13/7/06
- Hydrography linear (hierarchy) - DoW 13/7/06

(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 clearing of 1.44ha of native vegetation at sites spread along a 150km corridor within a highly vegetated landscape is not likely to result in appreciable land degradation. The clearing as proposed is not likely to be at variance to this principle.

Methodology GIS database:
- Average Annual Rainfall Isohyets - WRC 29/09/98
- Annual Evaporation Contours (Isopleths) - WRC 29/09/98
- Hydrogeology, statewide - DOW 13/07/06
- Hydrography, linear - DOW 13/7/06
- Salinity Risk LM 25m - DOLA 00
- Soils, Statewide DA 11/99
- Topographic contours statewide - DOLA and ARMY 12/09/02
- Hydrogeology, Statewide 05 Feb 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 may be at variance to this Principle**
The application includes sites within DEC managed unallocated crown land proposed for conservation. Additionally, areas under application occur 2km north of Urawa Nature Reserve and 7.6km east of Wandana Nature Reserve.

The clearing as proposed may therefore have an impact on conservation areas by introducing or spreading weed species, however other impacts are likely to be minimal given the small (1.44ha) area. Weed conditions will be imposed on the permit to reduce the risks of weeds spreading in these conservation areas.

Methodology GIS Databases:
- CALM Managed Lands and Waters - CALM 01/06/05
- Hydrography, linear - DOW 13/7/06
- Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 02
- System 1 to 5 and 7 to 12 areas - DEC 11/7/06

(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 clearing of 1.44ha of native vegetation from sites located over a 150km corridor within a highly vegetated landscape is not likely to have a significant impact on surface or ground water quality. The clearing as proposed is not likely to be at variance to this principle.

Methodology GIS database:
- Evapotranspiration Isopleths - WRC 29/09/98
- Groundwater Salinity Statewide DoW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrographic catchments, subcatchments - DoW 01/06/07
- Hydrography, linear - DOW 13/7/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Salinity Risk LM 25m - DOLA 00
- Topographic Contours, Statewide - DOLA 12/09/02

(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 clearing of 1.44ha of native vegetation from sites located over a 150km corridor within a highly vegetated landscape is not likely to have a significant impact on water runoff or flooding. The clearing as proposed is therefore not likely to be at variance to this principle.

Methodology GIS database:
- Evaporation Isopleths - WRC 29/09/98
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrographic catchments, subcatchments - DoW 01/06/07
- Hydrography, linear - DoW 13/7/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The applicant is accessing the land via authority issued by the Public Transport Authority under Section 182 of the Land Administration Act (1997).

The area under application lies within the Mullewa Wadjari community and Wajarri Yamatji Native Title Claim areas. The Mullewa Wadjari People raised an objection to this proposal outlining a number of potential impacts on their registered native title rights and interests. These include, but are not limited to; direct interference with the community life of persons who are the holders of native title in relation to the land concerned; disturbance of lands and the creation of a right, where exercised, will result in the disturbance of these lands; substantial interference with claimant people's community presence or activity on the land concerned as a result of physical activities constituting the future act; major disturbance of the land concerned resulting from the proposed future act; protection of the land concerned to avoid outcomes offending the traditions and beliefs held by the claimant people; and interference with the spiritual aspects of the community life of the claimant people (DOC98530).

A submission was received from the Shire of Yalgoo objecting to the proposal on the basis that alternative routes had not been shown to have been given adequate consideration (DOC99781).

Methodology

4. Assessor's comments

Comment

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986, and the proposed clearing is at variance to Principle (f), may be at variance with Principles (b) and (h) and is not likely to be at variance to the remaining clearing Principles.

5. References

- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Oakajee Port and Rail Pty Ltd (2009). OPR Rail Development - Vegetation Clearing Permit Supporting Document - Engineering Feasibility Works, Mt Wittencoom to Wandina Station. TRIM ref DOC92695.
- Shepherd, D.P. (2007). Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.

6. Glossary

Term	Meaning
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
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 DEC)

