



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 3177/1

File Number: DEC11683

Duration of Permit: From 27 September 2009 to 27 September 2011

PERMIT HOLDER

SAWA Pty Ltd

LAND ON WHICH CLEARING IS TO BE DONE

LOT 79 ON PLAN 238627 (ST GEORGE RANGES 6728)

AUTHORISED ACTIVITY

Clearing of up to 592 hectares of native vegetation within the area hatched yellow on attached Plan 3177/1.

CONDITIONS

1. Weed control

- (a) When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds*:
- (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
 - (ii) ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
 - (iii) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.
- (b) At least once in each 12 month period for the term of this Permit, the Permit Holder must remove or kill any *weeds* or species permitted for planting under a Pastoral Diversification Permit growing within 500 metres of the areas hatched yellow on attached Plan 3177/1.

2. Vegetation management

The Permit Holder shall not clear native vegetation within 300 metres of the *riparian vegetation* of any *watercourse* or *wetland* within and/or adjacent to the area hatched yellow on Plan 3177/1.

3. Records must be kept

The Permit Holder must maintain the following records in relation to the clearing of native vegetation authorised under this Permit:

- (a) the species composition, structure and density of the cleared area;
- (b) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
- (c) the date that the area was cleared; and
- (d) the size of the area cleared (in hectares).

4. Reporting

- (a) The Permit Holder must provide to the CEO, on or before 30 June of each year, a written report of records required under condition 3 of this Permit and activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 27 June 2011, the permit holder must provide to the CEO a written report of records required under condition 3 of this Permit where these records have not already been provided under condition 4(a) of this Permit.

Definitions

The following meanings are given to terms used in this Permit:

fill means material used to increase the ground level, or fill a hollow;

mulch means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

riparian vegetation has the meaning given to it in Regulation 3 of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004;

term means the duration of this Permit, including as amended or renewed;

watercourse has the meaning given to it in section 3 of the *Rights in Water and Irrigation Act 1914*;

weed/s, for the purpose of this permit, means a species listed in Appendix 3 of the *Environmental Weed Strategy* published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agriculture and Related Resources Protection Act 1976*, excluding those species permitted for planting under a Pastoral Diversification Permit, issued by the Department of Planning and Infrastructure.

wetland/s means an area of seasonally, intermittently or permanently waterlogged or inundated land, whether natural or otherwise, and includes a lake, swamp, marsh, spring, dampland, tidal flat or estuary

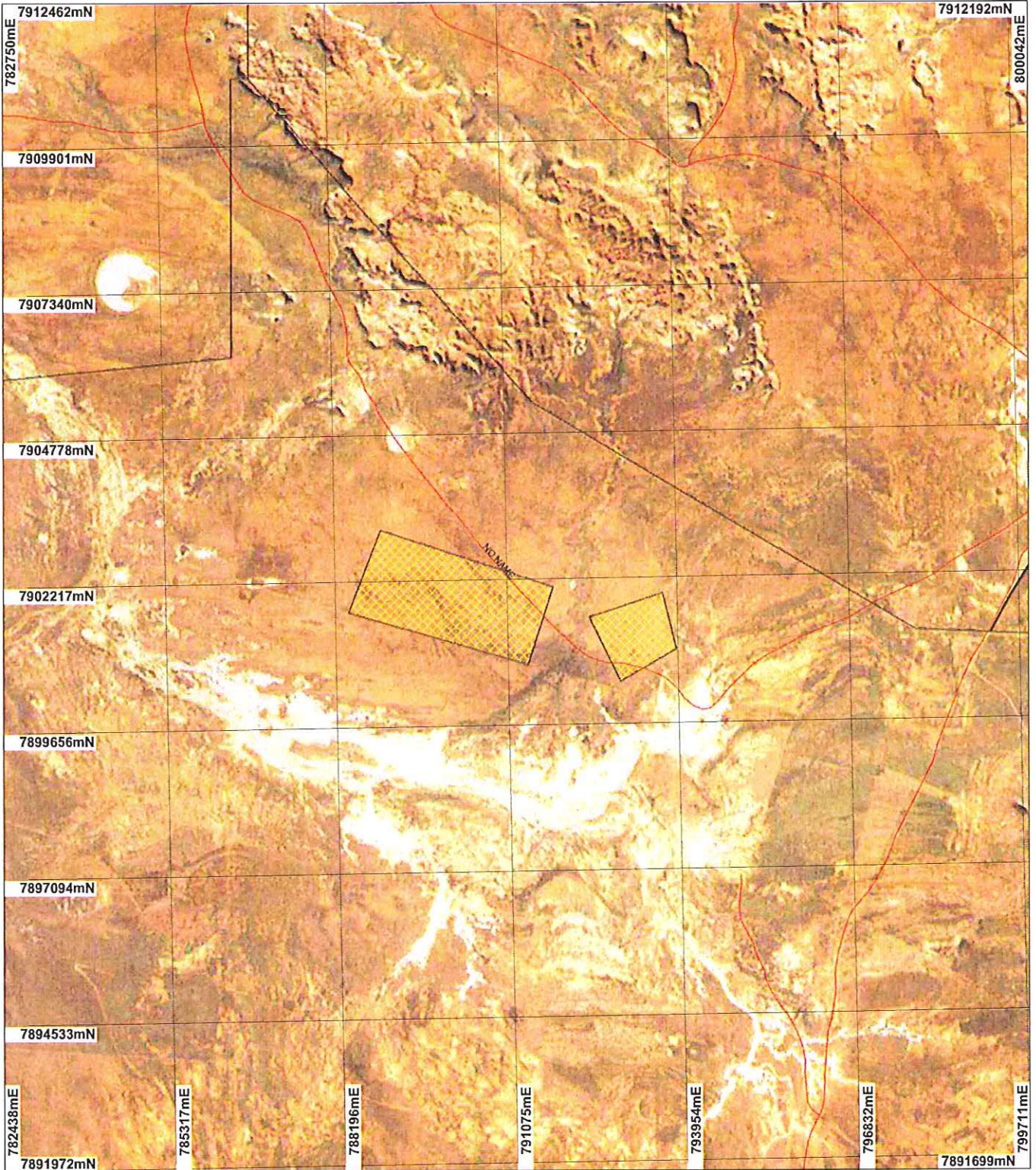


Keith Claymore
A/ ASSISTANT DIRECTOR
NATURE CONSERVATION DIVISION

*Officer delegated under Section 20
of the Environmental Protection Act 1986*

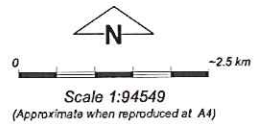
27 August 2009

Plan 3177/1



LEGEND

-  Clearing Instruments
-  Road Centrelines
-  Cadastre



Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

Kirk Claymore 27/8/09
 K Claymore

Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.





1. Application details

1.1. Permit application details

Permit application No.: 3177/1
 Permit type: Area Permit

1.2. Proponent details

Proponent's name: SAWA Pty Ltd

1.3. Property details

Property: LOT 79 ON PLAN 238627 (ST GEORGE RANGES 6728)
 Local Government Area: Shire Of Derby-West Kimberley
 Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
592		Mechanical Removal	Pastoral Diversification

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 879 - Grasslands, short bunch grass savanna low tree; bauhinia over Aristida pruinosa short grasses on plains. (Shepherd, 2007)	The application is to clear 592 hectares of vegetation for the purpose of establishing a maize crop. The application area is regularly stocked with cattle and has a moderate level of grazing pressure. The vegetation is considered to be in good range condition.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The vegetation description and condition was determined by DAFWA (2009) site inspection (TRIM ref DOC 94007).
Beard Vegetation Association 101 - Hummock grasslands, shrub steppe; Acacia pachycarpa over soft Spinifex.			

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 may be at variance to this Principle**
 The application is to clear 592ha of native vegetation for the purpose of establishing a maize crop. The vegetation under application is mapped as Beard Vegetation Units 879 (Grasslands, short bunch grass savanna low tree; bauhinia over Aristida pruinosa short grasses on plains) and 101 (Hummock grasslands, shrub steppe; Acacia pachycarpa over soft Spinifex) (Shepherd 2007) and the vegetation is considered to be in good range condition. (DAFWA 2009). The application area is regularly stocked with cattle and has a moderate level of grazing pressure, additionally the area was recently burnt (DAFWA 2009).

The vegetation types of the application area are well represented (approximately 100% of pre-European extent remaining (Shepherd 2007)) therefore the vegetation under application is not likely to be significant as habitat for any fauna indigenous to Western Australia.

One priority flora species has been recorded in the local area (30km radius). *Trianthema kimberleyi* (P1) was recorded 14km north east of the application area, however given the soil and habitat requirements for this taxon, it is not likely to occur within the applied area (DEC 2009).

No priority fauna species or priority ecological communities have been recorded within a 30km radius of the application area. This may be due to the lack of information available for the local area.

Methodology DAFWA (2009)
 DEC (2009)

GIS database:
 - SAC Biodatasets - accessed 2 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

One rare fauna species has been recorded within the local area (30km radius). *Macrotis lagotis* (Bilby) is listed as vulnerable, and was sighted 24km west of the applied area. Bilbies are known to inhabit mulga scrub and hummock grasslands on sandplains or along drainage or salt lake systems. It is therefore likely the vegetation surrounding the nearby minor perennial watercourse may be suitable habitat for this species, however a 300m buffer will be maintained as a condition of the Permit and the proposed clearing is not likely to impact on Bilby habitat as a result.

Given the vegetation types are well represented (approximately 100% of pre-European extent remaining) the vegetation under application is not likely to be significant habitat for native fauna.

Methodology GIS database:

- SAC Biodatasets - accessed 2 July 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

There are no rare flora species recorded in the local area (30km radius) and the vegetation types under application are well represented (approximately 100% of pre-European extent remaining). Therefore the vegetation under application is not likely to be necessary for the continued existence of rare flora, and the proposed clearing is not likely to be at variance to this principle.

Methodology GIS database:

- Declared Rare and Priority Flora List - CALM 13/08/03
- Pre European Vegetation - DA 01/01
- SAC Biodatasets - accessed 2 July 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

There are no threatened ecological communities (TECs) recorded in the local area (30km radius) and the vegetation types under application are well represented (approximately 100% of pre-European extent remaining). Therefore the vegetation under application is not likely to be necessary for the maintenance of TECs.

Methodology GIS Database:

- SAC Biodatasets - accessed 2 July 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 at variance to this Principle

Beard vegetation associations 879 and 101 are both well represented with approximately 100% of the pre-European extent currently remaining within the Ord Victoria Plain IBRA bioregion (Shepherd 2007).

The vegetation under application is not significant as a remnant of vegetation in a highly cleared landscape; therefore the clearing as proposed is not 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 2 July 09

(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 application area is 110m east of a minor perennial watercourse, 75m north east of an area subject to inundation and 3.6km east of a major non perennial watercourse. The vegetation under application is therefore not considered to be growing in, or in association with, a watercourse or wetland. The clearing as proposed is therefore not likely to be at variance to this principle.

Methodology GIS Databases:

- 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 as proposed is not likely to cause appreciable land degradation provided that minimum tillage cultivation techniques are used, and that stubble at least 150mm high is retained to prevent wind erosion (DAFWA 2009). It is unlikely that land salinisation would result from the proposed clearing (DAFWA 2009). The clearing as proposed is therefore not likely to be at variance to this principle.

Methodology DAFWA (2009)

GIS database:

- Average Annual Rainfall Isohyets - WRC 29/09/98
- Annual Evaporation Contours (Isopleths) - WRC 29/09/98
- Hydrogeology, 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
- 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 is not likely to be at variance to this Principle

No conservation areas are mapped within the local area (30km radius) of the area under application. The clearing as proposed is therefore not likely to be at variance to this principle.

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 may be at variance to this Principle

The application falls within the Fitzroy River hydrographic catchment, and is 110m from a minor perennial watercourse, 75m from an area subject to inundation and 3.6km from a major non-perennial watercourse. In order to prevent surface water degradation, a buffer of native vegetation of at least 300m should be left between the application area and the watercourses (DAFWA 2009), and this will be imposed as a condition of the Permit.

Methodology DAFWA (2009)

GIS Databases:

- 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 proposed clearing is situated on sandy soil and as such has good drainage (DAFWA 2009). Seasonal heavy downpours can cause localised flooding, but this is likely to quickly drain away (DAFWA 2009). The proposal is not likely to exacerbate flooding and is therefore not likely to be at variance to this principle.

Methodology DAFWA (2009)

GIS database:

- Evaporation Isoleths - 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

As the purpose for clearing is not consistent with the pastoral lease over the application area the clearing proposal constitutes a future act. However, there are no Native Title claims currently encompassing the area under application (TRIM ref DOC94005).

A pastoral diversification permit is required for the planting of species outside of those permitted under the pastoral lease. The applicant has applied to the Pastoral Lands Board for the permit.

The proponent is planning on establishing a maize (*Zea mays*) crop for fodder and grain. *Zea mays* has high fertiliser requirements, is highly digestible and must be replanted annually, therefore its risk of escape is very low (TRIM ref DOC94157).

**Methodology TRIM ref DOC94157
TRIM ref DOC94005**

GIS database:

- Cadastre - Landgate Dec 07
- Native Title Claims - LA 2/5/07
- RIWI Act, Groundwater Areas - DoW 13/07/06
- RIWI Act, Irrigation Districts - DoW 13/07/06
- Town Planning Scheme Zones - MFP 31/08/98
- Aboriginal Sites of Significance 26 April 2007
- Public Drinking Water Source Areas (PDWSAs) - 07/02/06

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 may be at variance to Principles (a) and (i) and is not likely to be at variance to the remaining clearing Principles.

5. References

- DEC (2009) Flora Advice. Department of Environment and Conservation Trim Ref DOC94662.
 Department of Agriculture and Food (2009) Advice. Commissioner of Soil and Land Conservation. DEC TRIM Ref: DOC94375.
 Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
 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)