



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 5237/1
Permit Holder:	Department of Regional Development and Lands
Duration of Permit:	20 September 2012 – 20 September 2017

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

PART I – CLEARING AUTHORISED

1. Purpose for which clearing may be done

Clearing for the purpose of constructing flood mitigation levees, associated works and road re-alignment.

2. Land on which clearing is to be done

Section 91 Lic 00854/1996_03_171
South River Road reserve, South Plantations
Carnarvon-Mullewa Road reserve, Inggarda
Road Reserve, Inggarda

3. Area of Clearing

The Permit Holder must not clear more than 215 hectares of native vegetation within the areas shaded yellow on attached Plan 5237/1.

4. Application

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

5. Type of clearing authorised

This Permit authorises the Permit Holder to clear native vegetation for activities to the extent that the Permit Holder has the right to access land under the *Land Administration Act 1997* or any other written law.

6. Compliance with Assessment Sequence and Management Procedures

Prior to clearing any native vegetation under conditions 1, 2 and 3 of this Permit, the Permit Holder must comply with the Assessment Sequence and the Management Procedures set out in Part II of this Permit.

PART II – ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

7. Avoid, minimise etc clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- (a) avoid the clearing of native vegetation;
- (b) minimise the amount of native vegetation to be cleared; and
- (c) reduce the impact of clearing on any environmental value.

8. Weed control

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*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

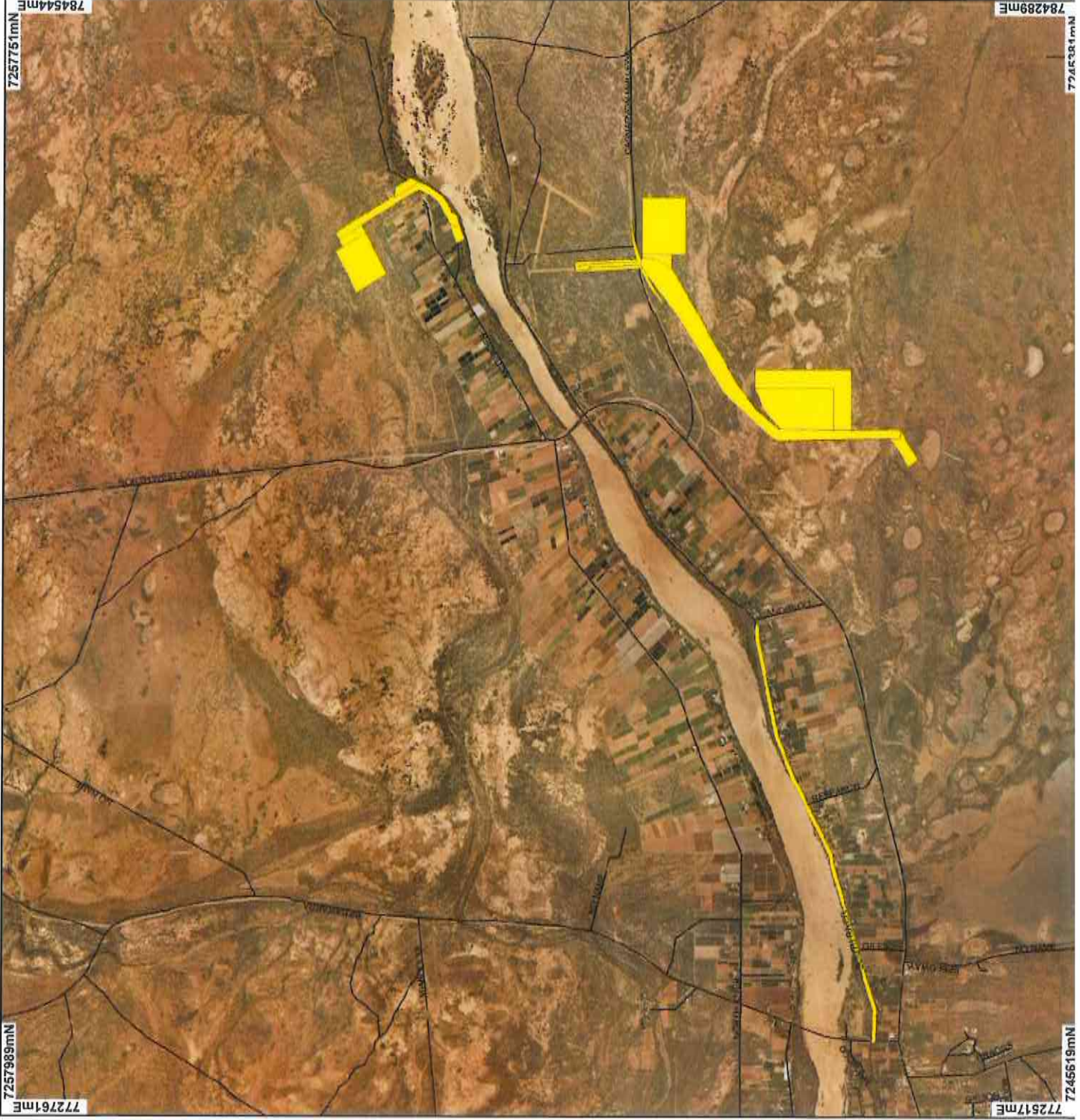


Roxane Shadbolt
A/MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

20 September 2012

Plan 5237/1



LEGEND

-  Road Centrelines
-  Clearing Instruments
-  Areas Approved to Clear
-  Carnarvon 1.4m Orthomosaic - Landgate 2002

* Project Data. This data has not been quality assured. Please contact map author for details.



0 1.5km

Scale 1:60002

(Approximate when reproduced at Letter)

Geocentric Datum Australia 1994

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

R Sheldahl Date 20/9/12

R Sheldahl

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.



Department of Environment and Conservation

Our environment. Our future.

WA State Copyright 2002



1. Application details

1.1. Permit application details

Permit application No.: 5237/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Department of Regional Development and Lands

1.3. Property details

Property:

LOT 415 ON PLAN 220782 (House No. 415 NORTH WEST COASTAL INGGARDA 6701)
 LOT 5108 ON PLAN 41863 (NORTH PLANTATIONS 6701)
 LOT 5107 ON PLAN 41863 (NORTH PLANTATIONS 6701)
 LOT 5106 ON PLAN 41863 (NORTH PLANTATIONS 6701)
 LOT 5104 ON PLAN 41863 (NORTH PLANTATIONS 6701)
 LOT 301 ON PLAN 211355 (House No. 219 MCGLADES NORTH PLANTATIONS 6701)
 LOT 5105 ON PLAN 41863 (NORTH PLANTATIONS 6701)
 LOT 307 ON PLAN 174874 (House No. 260 MCGLADES NORTH PLANTATIONS 6701)
 LOT 308 ON PLAN 174874 (House No. 280 MCGLADES NORTH PLANTATIONS 6701)
 LOT 309 ON PLAN 174874 (House No. 291 MCGLADES NORTH PLANTATIONS 6701)
 LOT 3099 ON PLAN 41863 (NORTH PLANTATIONS 6701)
 LOT 446 ON PLAN 54526 (INGGARDA 6701)
 ROAD RESERVE (INGGARDA 6701)
 LOT 415 ON PLAN 220782 (House No. 415 NORTH WEST COASTAL INGGARDA 6701)
 LOT 171 ON PLAN 204547 (House No. 450 SOUTH RIVER SOUTH PLANTATIONS 6701)
 LOT 6543 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6544 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 170 ON PLAN 204547 (House No. 472 SOUTH RIVER SOUTH PLANTATIONS 6701)
 LOT 6545 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5560 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 ROAD RESERVE (SOUTH PLANTATIONS 6701)
 LOT 5559 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6542 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6541 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5558 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5557 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6540 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5556 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6539 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6538 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5555 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5554 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6537 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5553 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6536 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5552 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6535 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5551 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6534 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5550 ON PLAN 41863 (Lot No. 5550 SOUTH RIVER SOUTH PLANTATIONS 6701)
 LOT 6533 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5549 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6532 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5548 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 3553 ON PLAN 41863 (SOUTH PLANTATIONS 6701)

LOT 3552 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 3551 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5546 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5547 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6529 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6530 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5545 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6528 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5544 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6527 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5543 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6526 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5542 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6525 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5541 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6524 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5540 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6523 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5539 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6522 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5538 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6521 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5537 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6520 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5536 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6519 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5535 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6518 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5534 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6517 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5533 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6516 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5532 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6515 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5530 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6514 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 5528 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 6513 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 7502 ON PLAN 41863 (SOUTH PLANTATIONS 6701)
 LOT 312 ON PLAN 42660 (SOUTH PLANTATIONS 6701)
 LOT 241 ON PLAN 37700 (Lot No. 241 BIBBAWARRA KINGSFORD 6701)

Local Government Area:

Shire of Carnarvon

1.4. Application

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

1.5. Decision on application

Decision on Permit Application:	Grant
Decision Date:	20 September 2012

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 vegetation under application is mapped as: Beard Vegetation Association 129 - Bare areas; drift sand Beard Vegetation Association 205 - Shrublands; Acacia sclerosperma & bowgada	The application to clear is for 215ha for the purpose of constructing flood mitigation levees and associated works. The vegetation under application is typical of floodplain and claypan habitats.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994) TO	The condition and description of the vegetation under application was determined via the use of aerial imagery (Carnarvon 1.4m Orthomosaic - Landgate 2002) and GHD consultants report (GHD, 2012).

scrub

Beard Vegetation Association 308 - Mosaic: Shrublands; Acacia sclerosperma sparse scrub / Succulent steppe; saltbush & bluebush. (Shepherd et al, 2001)

The project area is predominantly associated with Beard Vegetation Association 129 and 308. A minor incursion into Beard Vegetation Association 205 may occur during road works.

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

The vegetation appears to range in condition from degraded to very good (Keighery, 1994) and is likely to have been impacted from disturbances such as existing road infrastructure and uncontrolled access given the proximity to Carnarvon townsite.

3. Assessment of application against clearing principles

The proposed combined clearing of 215 hectares at 3 locations (McGlades Road, Lawson Street and South River Road) is required for the construction of flood mitigation levees as part of the Carnarvon Flood Mitigation Project. Of the three sites, more than 70% of the proposed clearing will occur for the Lawson Street levee (and borrow pits) on undeveloped land under the control of the Department of Regional Development and Lands. The project will involve construction of levees, minor road realignment works and excavation of borrow pits.

Aerial imagery (Carnarvon 1.4m Orthomosaic) indicates the vegetation of the three project areas is typical of the Gascoyne River floodplain and the associated mapped vegetation units (GHD, 2012; Shepherd et al, 2001). The vegetation condition ranges from being in a degraded to very good (Keighery, 1994) condition with weeds present in some places and evidence of low level disturbance associated with human activities (e.g. road reserves and vehicular tracks) given the areas close proximity to the Carnarvon Townsite.

The local area (10km radius) is approximately 80-90% vegetated, the vegetation types proposed to be cleared are well represented and there are no records of rare flora or threatened ecological communities within the local area. Historical records of two species of priority flora (Gnephosis sp. Billabong (P1) and Rumes crystallinus (P2)) exist for the location of the Lawson Street application area. recent flora surveys did not locate these species (GHD, 2012).

Given the large amount of similar habitat in the local area, the vegetation under application is not considered to comprise significant habitat for fauna, and is not likely to contribute significantly to biodiversity (including priority flora) or conservation values at a local or regional scale.

At the closest point, the southern end of the Lawson Street application area is located adjacent to several small ephemeral pools of the outer margin of the McNeill Claypan System, a mapped ANCA wetland. One of the borrow pits and a section of the proposed levee will impact upon a mapped, non-perennial minor watercourse which drains into the wetland system. The wetland and watercourse areas hold water for only short periods of time following heavy rains, or as a result of the Gascoyne River flood events. No clearing within the claypan is required for this part of the flood mitigation project. The clearing as proposed however is at variance to principle (f).

The clearing of vegetation and soil disturbance, and the changes to the natural surface hydrology may cause or lead to localised, moderate levels of land degradation and water quality issues in the short term if rain or flooding events should occur during the, or post, construction phase. It is considered that the clearing as proposed may be at variance to clearing principles (g) and (i).

The proposed clearing is not likely to be at variance to the remaining Principles.

Methodology

References

- GHD (2012)
- Keighery (1994)
- Shepherd et al (2001)
- Western Australian Government (2011)

GIS database:

- Carnarvon 1.4m Orthomosaic
- Interim Biogeographic Regionalisation of Australia
- DEC Tenure

- SAC Biodatasets (accessed Sept 2012)
- Soils, Statewide
- Pre European Vegetation
- Hydrography linear (hierarchy)

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

Comments

The Department of Water (DoW) led an inter-agency working group to develop flood mitigation planning advice for the Shire of Carnarvon and Department of Regional Development and Lands (DRDL). The proposed levees will alter the flood flows across the Gascoyne River floodplain to protect the horticultural and plantation areas of Carnarvon. Main Roads WA will manage the design and construction phase of the flood mitigation project on behalf of DRDL, DoW and the Shire.

Authority to access allocated and un-allocated Crown land parcels upon which the works will be undertaken is contained in a DRDL Licence to Occupy Crown Land - Section 91 of the Land Administration Act 1997 (Lic 00854/1996_03_171). Similarly, the Shire of Carnarvon and DoW have provided written consent to allow access to and clearing upon their respective managed reserves and freehold land parcels.

The Gnulli Native Title claimants and the Yamatji Marlpa Aboriginal Corporation have been notified of the proposed clearing.

4. References

- GHD (2012) - Report for Main Roads WA - Carnarvon Flood Mitigation Works (61/28516) (DEC Ref: A541528)
 Government of Western Australia (2011); 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). 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.
- 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.

5. 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)