



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 4599/1
File Number: 2011/008621-1
Duration of Permit: From 17 August 2013 to 17 August 2015

PERMIT HOLDER

Terrence David Chisholm

LAND ON WHICH CLEARING IS TO BE DONE

Lot M1072 on Plan 4114, CARNAMAH

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 3.9 hectares of native vegetation within the area hatched yellow on attached Plan 4599/1.

CONDITIONS

1. Land on which revegetation and rehabilitation is to be done

Lot 5 on Diagram 9312, CARNAMAH
Lot M1071 on Plan 4114, CARNAMAH
Lot M1072 on Plan 4114, CARNAMAH

2. 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.

3. Vegetation management plan

In relation to the combined areas cross-hatched red on attached Plan 4599/, the Permit Holder must implement and adhere to the offset commitments as outlined in the document dated February 2013, titled "Vegetation Management Plan – Winchester Farm and Avago Pty Ltd t/a Winchester Industries Revision 2"; and in Midwest Concepts Solutions Pty Ltd's letter dated 23 October 2012, titled "Re: Application Clear Native Vegetation (Ref: CPS 4599/1)"; and including but not limited to:

- (a) the construction of a fence enclosing the northwest area outlined in red on attached Plan 4599/1, within three months of commencing clearing.
- (b) within one month of installing the fence the Permit Holder shall notify the CEO in writing that the fence has been completed.

4. Records to be Kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

- (a) In relation to the clearing of native vegetation authorised under this Permit:
 - (i) 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 or decimal degrees;

- (ii) the date that the area was cleared; and
- (iii) the size of the area cleared (in hectares).
- (b) In relation to the vegetation management plan pursuant to condition 3,
 - (i) detailed description of the vegetation management plan activities undertaken
 - (ii) the location where the environmental management plan activities occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
 - (iii) the date that the vegetation management plan activities occurred.

5. Reporting

- (a) The Permit Holder must provide to the CEO on or before 30 June of each year, a written report:
 - (i) of records required under condition 4 of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 January to 31 December of the preceding calendar year.
- (b) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding calendar year, a written report confirming that no clearing under this permit has been carried out, must be provided to the CEO on or before 30 June of each year.
- (c) Prior to 17 May 2015, the Permit Holder must provide to the CEO a written report of records required under condition 4 of this Permit where these records have not already been provided under condition 5(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;

weed/s means any plant -

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
- (b) published in the Department of Environment and Conservation Regional Weed Assessments, regardless of ranking; or
- (c) not indigenous to the area concerned.

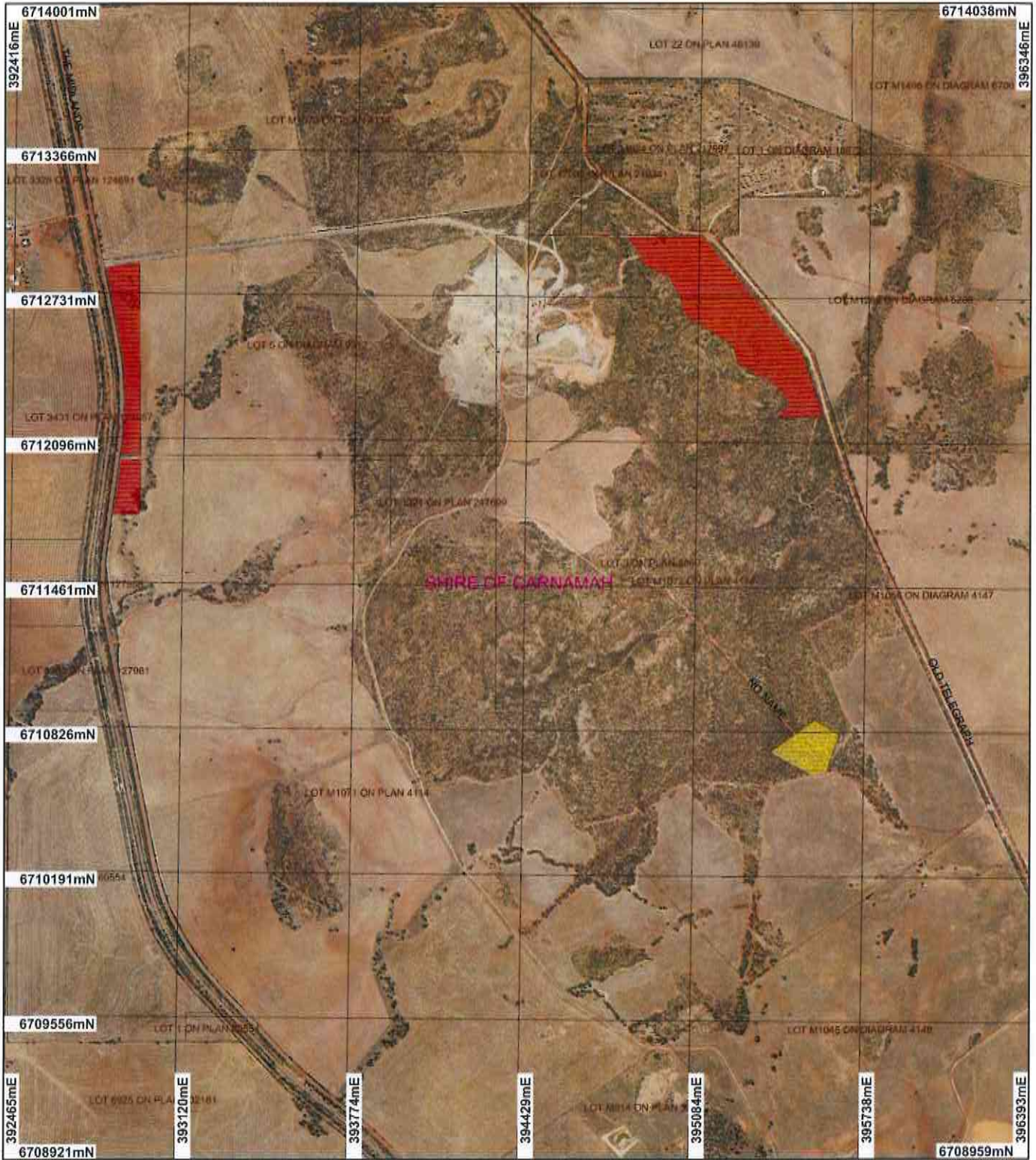
B. Walker

Belinda Walker
A/MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

18 July 2013

Plan 4599/1



LEGEND

- Local Government Authorities
- Road Centrelines
- Cadastre for labelling
- Freehold (cont)

- Crown Reserve
- State Forest / Timber Reserve
- Marine Park
- Crown Lease
- Lease / Reserve
- Lease on State Forest / Timber Reserve
- Public Roads (cont)

- Unallocated Crown Land
- Water
- Clearing Instruments**
- Areas Applied to Clear
- Areas Subject to Conditions
- Areas Approved to Clear

Carnamah 50cm Orthomosaic
Landgate 2006



0 625 m

Scale 1:22672
(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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

B. Walker Date 18/7/13

Belinda Walker

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

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Clearing Permit Decision Report

Government of Western Australia
Department of Environment Regulation

1. Application details

1.1. Permit application details

Permit application No.: 4599/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Terrance David Chisholm

1.3. Property details

Property: LOT M1072 ON PLAN 4114 (CARNAMAH 6517)
Local Government Area: Shire of Carnamah
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
3.9		Mechanical Removal	Dam construction or maintenance

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 11 July 2013

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 mapped Beard vegetation association 352 is described as Medium woodland; York gum (Shepherd et al. 2001).	The area under application consists of Low York gum (<i>Eucalyptus loxophleba</i>) woodland with scattered Jam (<i>Acacia acuminata</i>). Understorey consisting of acacia and hakea species. Evidence of understorey loss through historic grazing and some invasive weeds present including Patterson's curse and barley grass (DEC, 2011).	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The condition and description of the vegetation was obtained from a Department of Environment and Conservation site visit (DEC, 2011).

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**

This application is to clear up to 3.9 hectares of native vegetation within Lot M1072 on Plan 4114, Carnamah, for the purpose of constructing a dam in order to drought-proof the farming enterprise on the property (DEC, 2011).

The area under application consists of Low York gum (*Eucalyptus loxophleba*) woodland with scattered Jam (*Acacia acuminata*) and a middle storey consisting of acacia and hakea species (DEC, 2011). There is evidence of understorey loss through historic grazing and some invasive weeds present including Patterson's curse and barley grass (DEC, 2011).

The area under application forms the southern part of a larger significant remnant within an extensively cleared area with approximately 25 per cent of native vegetation remaining in the local area (10 kilometre radius). The application area is considered a significant remnant as it consists of poorly represented vegetation in good (Keighery, 1994) condition and forms part of a north-south linkage of remnant vegetation in the highly cleared local landscape.

Three conservation significant fauna species protected under the Wildlife Conservation Act 1950 have been

recorded in the local area (10 kilometres radius) with two of these species likely to occur within the application area. These species are likely to use the vegetation under application and the larger remnant of which this is a part.

Given the highly cleared landscape and that the vegetation consists of a highly cleared vegetation association and may contain significant habitat for threatened and local fauna, it may be considered for the vegetation under application to comprise high biodiversity values. Therefore, the proposed clearing may be at variance to this Principle.

To address the impacts of clearing within a highly cleared landscape and maintain the environmental values of the property, the applicant has submitted an offset and developed a vegetation management plan for the property to rehabilitate and fence 10 hectares of farmland and rehabilitate 22 hectares of farmland (Midwest Concepts and Solutions, 2013).

Methodology References:
-DEC (2011)
GIS Databases
-Pre-European vegetation
-Sac Bio datasets (14 Oct 2011)

(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 may be at variance to this Principle

Three conservation significant fauna species under the Wildlife Conservation Act 1950 have been recorded in the local area (10 kilometre radius);

- Egernia stokesii subsp. Badia (Western spiny-tailed skink) is Rare or Likely to become Extinct
- Aspidites ramsayi (Woma python) is Specially Protected
- Cacatua leadbeateri (Major Mitchell's Cockatoo) is Specially Protected (DEC, 2007-).

The area under application is part of a larger significant remnant of low York Gum woodland in good (Keighery, 1994) condition within an extensively cleared area with approximately 25 per cent of native vegetation remaining in the local area. The area under application is significant due to it consisting of poorly represented vegetation in good (Keighery, 1994) condition and forms part of a north-south linkage of remnant vegetation in a highly cleared local landscape. The removal of 3.9 hectares of vegetation from the edge of a larger remnant will cause some fragmentation of the linkage, including limiting the ability of native fauna to disperse throughout the local area.

The woma python occurs in the arid zones of Western Australia, favouring open myrtaceous heath on sandplains, and dune fields dominated by spinifex (*Triodia* spp.). This habitat does not occur within the area under application (DEC, 2011) therefore it is unlikely to be impacted by the proposed clearing.

Major Mitchell's Cockatoo is a specially protected woodland bird with the major threats to its survival being clearing of woodlands, heavy grazing of feeding areas resulting in the removal of seeding grasses and preventing regeneration of food plants and loss of existing and future hollow-bearing trees (Foreshaw, 2003).

The Western Spiny-tailed Skink is also protected under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 and is listed as endangered. This reptile shelters in hollow logs, behind bark of fallen trees and in granite crevices (DEC, 2007). The area under application contains fallen trees and small amounts of ground debris and therefore may support this species.

Therefore the 3.9 hectares area of native vegetation in good (Keighery, 1994) condition within an extensively cleared area may comprise habitat for the Western Spiny-tailed Skink and Major Mitchell's Cockatoo.

Given that the application area may contain habitat for conservation significant fauna and contributes to a larger remnant that is significant in the extensively cleared landscape, the proposed clearing may be at variance to this Principle.

To address the impacts of clearing within a highly cleared landscape and maintain the environmental values of the property, the applicant has submitted an offset and developed a vegetation management plan for the property to rehabilitate and fence 10 hectares of farmland and rehabilitate 22 hectares of farmland (Midwest Concepts and Solutions, 2013).

Methodology References
DEC (2011)
DEC (2007)
Foreshaw (2003)
GIS Databases
Carnamah 50cm Orthomosaic - Landgate 2006

(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 five known rare flora species mapped within the local area (10kilometre radius).

The closest known record of rare flora has multiple records located on roadsides three kilometres west of the proposed clearing area. This species occurs on the same soil and vegetation type as the area under application however favours roadside habitat and ungrazed areas (Brown et al, 1998). Therefore this species is unlikely to occur within the application area given the absence of roadside habitat.

The other four known rare flora species are unlikely to occur in the soils associated with the application area.

Given the above, the area under application is not likely to be at variance to this Principle

Methodology

References;
DEC (2011)
Brown et al. (1998)
GIS Databases:
SAC Bio Datasets (Accessed 14 Oct 2011)

(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

The closest known record of a threatened ecological community (TEC) is the Inering System, located 3.8 kilometres west of the proposed clearing area on same vegetation and soil type as the vegetation under application.

However, a DEC site inspection determined the area under application is low in the landscape and not considered to be similar to the description for the Inering Hills TEC (DEC, 2011).

Given the above the area under application is not likely to be at variance to this Principle.

Methodology

References;
DEC (2011)
GIS Databases:
- SAC Bio Datasets (Accessed 14 Oct 2011)

(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 may be at variance to this Principle

The area under application forms part of a north-south linkage of remnant vegetation in the highly cleared local landscape, with approximately 25 per cent of native vegetation remaining in the local area (10 kilometre radius).

Beard vegetation association 352 has approximately 18 per cent of its pre-European extent remaining within the Avon Wheatbelt bioregion (Government of Western Australia 2013). The area under application consists of this poorly represented vegetation in good (Keighery, 1994) condition.

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001). However it is noted that the clearing of 3.9 hectares will reduce the current extent remaining from 111,029 hectares to 111,025 hectares, a decrease of approximately 0.004 per cent. Therefore, the proposed clearing of 3.9 hectares will not significantly impact on the remaining extent of this vegetation association.

Given the vegetation may contain significant biodiversity and fauna habitat values and is within an extensively cleared landscape the proposed clearing may be at variance to this principle.

To address the impacts of clearing within a highly cleared landscape and maintain the environmental values of the property, the applicant has submitted an offset and developed a vegetation management plan for the property to rehabilitate and fence 10 hectares of farmland and rehabilitate 22 hectares of farmland (Midwest Concepts and Solutions, 2013).

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion* Avon Wheatbelt (AW)	9,517,109	1,736,214	18.2	9.5
Shire* Shire of Carnamah	287,233	118,545	41.3	42.1
Beard Vegetation Association in Bioregion* 352	630,581	111,029	17.6	9.2

*Government of Western Australia (2013)

Methodology References:
Midwest Concepts and Solutions (2013)
Commonwealth of Australia (2001)
Government of Western Australia (2013)
GIS Databases:
- Pre European Vegetation

(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**
There are no watercourses, wetlands, or riparian vegetation within the area under application.

Three kilometres south is a minor tributary (unnamed), 4.6 kilometres south is Petan Creek, and the Yarra Yarra lakes are located 5.4 kilometres west of the area under application.

Given the distance to the nearest watercourse or wetland it is unlikely the proposed clearing is at variance to this principle.

Methodology GIS Databases:
- Hydrography, linear

(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 area under application is mapped as Xd2 (Northcote et al, 1960- 68) which is described as gently rolling terrain of smooth ridges and spurs separated by valleys showing recently developed salinity; breakaways occur infrequently; chief soils are sandy neutral yellow mottled soils containing some ironstone gravels.

The Department of Water (DoW) advise the geology of the area is fractured rock which has limited recharge potential and the proposed clearing is unlikely to impact on groundwater salinity (Dow, 2011).

Given the above the proposal is not likely to be at variance to this principle.

Methodology References
DoW (2011)
Northcote et al (1960- 68)
GIS Databases:
-Groundwater Salinity, statewide
-Salinity Risk LM 25m

(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 Yarra Yarra Lakes Conservation Park is located approximately 5.4 kilometres west of the area under application.

Given the distance to this Conservation Park it is unlikely the proposed clearing will have an impact on the environmental values of the lake.

Given the above the area under application is not likely to be at variance to this Principle.

Methodology GIS Databases:
-DEC Tenure

(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**

Department of Water (DOW) advise the proposed clearing is unlikely to impact on groundwater salinity due to the existing groundwater quality being marginal to saline, the lack of existing licensed users within a (2.5 kilometre) radius of the clearing site, the small area of the proposed clearing and the nature of the geology being fractured rock, with limited recharge potential (Dow, 2011).

In addition, DoW expects the proponent to adhere to best management practices to ensure no unnecessary damage is caused (DoW, 2011).

Therefore the proposed clearing of 3.9 hectares is unlikely to cause deterioration in the quality of groundwater in the form of salinity.

Given the above the area under application is not likely to be variance to this Principle.

Methodology References;
DoW (2011)

(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**

Annual rainfall is low at 400mm per annum and the area is mapped as 280- 300 meters above sea level.

Given the above, the proposed clearing is unlikely to cause or exacerbate flooding.

Methodology References;
DEC (2011)

GIS Databases:
- Average Rainfall Isohyets
- Topographic contours statewide

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

Comments

The application area is within the EPA Position Statement No.2 which concludes that further clearing for agricultural purposes should not be considered. In exceptional circumstances the Environmental Protection Authority (EPA) would consider supporting clearing for agriculture within this region, if opportunities for addressing biodiversity could include rehabilitation of disturbed areas and/or acquisition of areas containing remnant native vegetation, and the area proposed for clearing is relatively small (EPA, 2000).

To address the impacts of clearing within a highly cleared landscape and maintain the environmental values of the property, the applicant has submitted an offset and developed a vegetation management plan for the property to rehabilitate and fence 10 hectares of farmland and rehabilitate 22 hectares of farmland (Midwest Concepts and Solutions, 2013).

The area under application is within a proclaimed groundwater area, the Gascoyne Groundwater Area, under the Rights in Water and Irrigation Act 1914 (RIWI Act). DoW advises that any construction of bores or soaks, and the taking of groundwater will require licensing. If however the dam is to be fed solely by rainwater, and is not constructed as a soak to intercept groundwater, a licence under section 5C of the RIWI Act will not be required. However this may not be an effective method of water collection due to varying rainfall and high evaporation rates (DoW, 2011).

The applicant advised if the dam were to hold a lot of water they may wish to clear a greater area to increase storage capacity, this would not be known until the dam is constructed and a separate clearing application will be submitted (DEC, 2011). The applicant also advised the purpose of the proposed dam is for watering stock (sheep and cattle) and irrigating crops (DEC, 2011).

The Shire of Carnamah advised that they have no objection to the clearing application and no planning approval is required for the proposed dam and catchment (Shire of Carnamah, 2011).

Methodology References:
DEC (2011)
DoW (2011)
Shire of Carnamah (2011)

4. References

- Brown A., Thomson-Dans C. and Marchant N.(1998). Western Australia's Threatened Flora, Department of Conservation and Land Management, Western Australia.
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DEC (2007 -) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>.
- DEC (2007) DEC Fauna Habitat Notes.xls. February 2007. Department of Environment and Conservation, Western Australia.
- DoW (2011) Advice for Clearing Permit Application CPS 4599/1. Department of Water, Western Australia (DEC REF A442716).
- EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority, Western Australia.
- EPA (2006) Guidance for the Assessment of Environmental Factors - Level of Assessment for Proposals Affecting Natural Areas Within the System 6 Region and Swan Coastal Plain Portion of the System 1 Region. Guidance Statement No 10. Environmental Protection Authority, Western Australia.
- Foreshaw, J.M. (2003) Australian Parrots. CSIRO Publishing.
- Government of Western Australia. (2013). 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. 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.
- Midwest Concepts and Solutions (2013) Vegetation Management Plan, Winchester Farm and Avago Pty Ltd. March 2013.
- 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.
- Shire of Carnamah (2011); Response to direct interest letter for clearing permit application CPS 4599/1 received 17/10/2011; Shire of Carnamah
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/>

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)