



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 4815/1
Permit Holder:	Shire of Kulin
Duration of Permit:	23 April 2012 – 23 April 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 water catchment.

2. Land on which clearing is to be done

Lot 15558 on Deposited Plan 173411 (Reserve 25777) (KULIN WEST 6365)

3. Area of Clearing

The Permit Holder must not clear more than 26.68 hectares of native vegetation within the area hatched yellow on attached Plan 4815/1.

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 power to clear native vegetation for those activities under the *Land Administration Act 1997* or any other written law.

PART II – ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

6. 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* growing within areas cleared under this Permit.

7. Offsets

If part or all of the clearing to be done is or may be at variance with one or more of the clearing principles the Permit Holder must prepare and submit an *offset proposal* prior to 30 September 2012 and implement the *offset* in accordance with conditions 7(a) and (b) of this Permit.

(a) Determination of *offsets*:

- (i) in determining the *offset* to be implemented with respect to a particular area of native vegetation proposed to be cleared under this Permit, the Permit Holder must have regard to the *offset* principles contained in condition 7(b) of this Permit;
- (ii) once the Permit Holder has developed an *offset proposal*, the Permit Holder must provide that *offset proposal* to the CEO by 30 September 2012 for the CEO's approval prior implementing the *offset*;
- (iii) the Permit Holder shall implement the *offset proposal* approved under condition 7(a)(ii); and
- (iv) the *offset proposal* shall include a *direct offset*, timing for implementation of the *offset proposal* and may additionally include *contributing offsets*.

(b) For the purpose of this condition, the *offset* principles are as follows:

- (i) *direct offsets* should directly counterbalance the loss of the native vegetation;
- (ii) *contributing offsets* should complement and enhance the *direct offset*;
- (iii) *offsets* are implemented only once all avenues to avoid, minimise, rectify or reduce environmental impacts have been exhausted;
- (iv) the environmental values, habitat, species, *ecological community*, physical area, ecosystem, landscape, and hydrology of the *offset* should be the same as, or better than, that of the area of native vegetation being *offset*;
- (v) a ratio greater than 1:1 should be applied to the size of the area of native vegetation that is offset to compensate for the risk that the *offset* may fail;
- (vi) *offsets* must entail a robust and consistent assessment process;
- (vii) in determining an appropriate *offset*, consideration should be given to ecosystem function, rarity and type of *ecological community*, vegetation *condition*, habitat quality and area of native vegetation cleared;
- (viii) the *offset* should either result in no net loss of native vegetation, or lead to a net gain in native vegetation and improve the *condition* of the natural environment;
- (ix) *offsets* must satisfy all statutory requirements;
- (x) *offsets* must be clearly defined, documented and audited;
- (xi) *offsets* must ensure a long-term (10-30 year) benefit; and
- (xii) an *environmental specialist* must be involved in the design, assessment and monitoring of *offsets*.

PART III - RECORD KEEPING AND REPORTING

8. 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 species composition, structure and density of the cleared area;
- (ii) 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;
- (iii) the date that the area was cleared; and
- (iv) the size of the area cleared (in hectares).

(b) In relation to the offset of areas pursuant to condition 7:

- (i) the location of any area of *offsets* 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) a description of the *offset* activities undertaken; and
- (iii) the size of the *offset* area (in hectares).

9. 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 8 of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 23 January 2017, the Permit Holder must provide to the CEO a written report of records required under condition 8 of this Permit where these records have not already been provided under condition 9(a) (reporting condition) of this Permit.

DEFINITIONS

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

condition means the rating given to native vegetation using the *Keighery scale* and refers to the degree of change in the structure, density and species present in the particular vegetation in comparison to undisturbed vegetation of the same type;

contributing offset/s has the same meaning as is given to that term in the Environmental Protection Authority's *Position Statement No.9: Environmental Offsets*, January 2006;

direct offset/s has the same meaning as is given to that term in the Environmental Protection Authority's *Position Statement No.9: Environmental Offsets*, January 2006;

ecological community/ies means a naturally occurring biological assemblage that occurs in a particular type of habitat (English and Blythe, 1997; 1999);

environmental specialist means a person who is engaged by the Permit Holder for the purpose of providing environmental advice, who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit;

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

Keighery scale means the vegetation condition scale described in *Bushland Plant Survey: A Guide to Plant Community Survey for the Community (1994)* as developed by B.J. Keighery and published by the Wildflower Society of WA (Inc). Nedlands, Western Australia;

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;

offset proposal means an *offset* determined by the Permit Holder in accordance with condition 7 of this Permit;

offset/s means an offset required to be implemented under condition 7 of this Permit;

weed/s 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*.

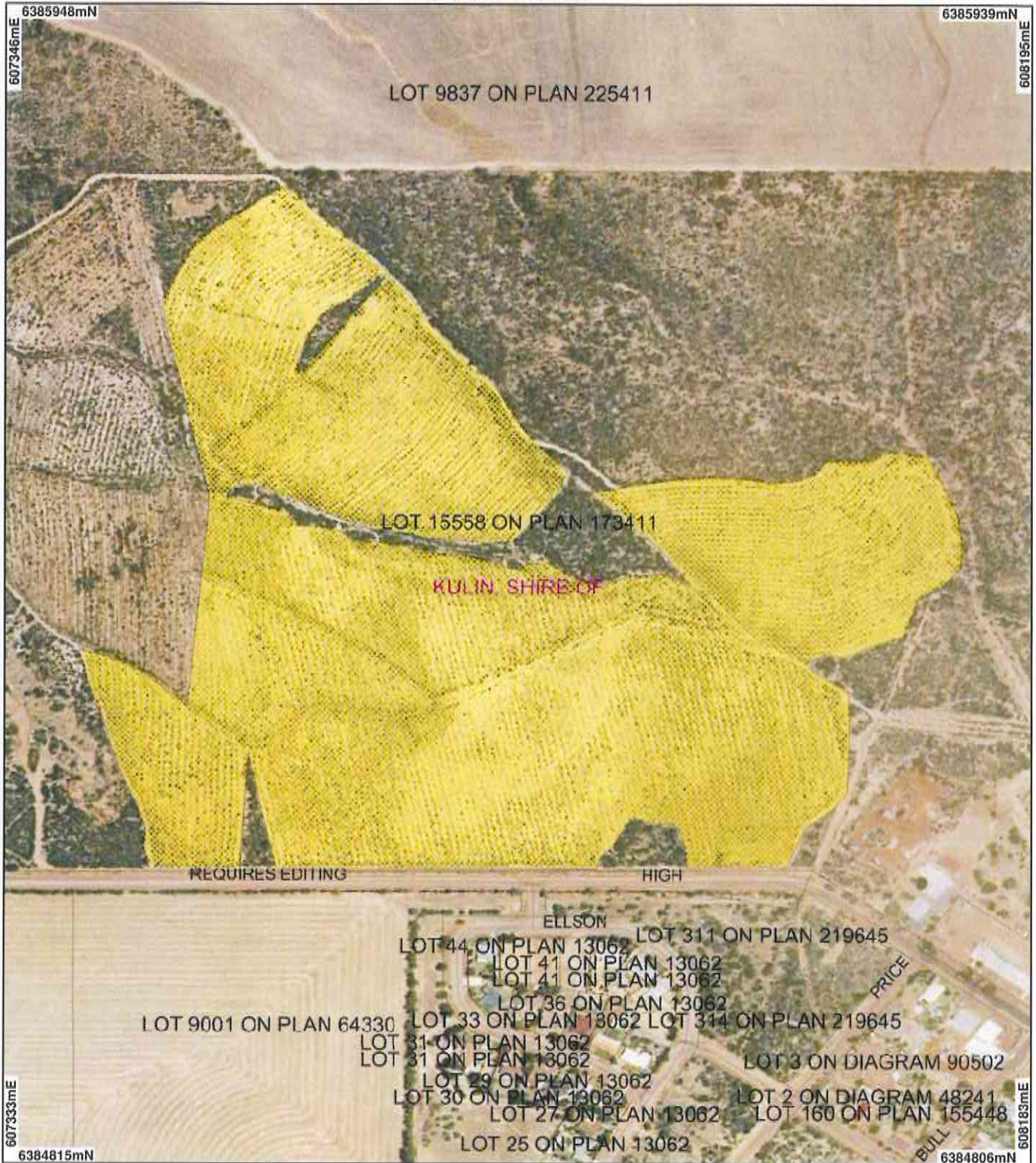


M. Warnock
MANAGER, COMPLIANCE AND AUDIT SECTION
NATIVE VEGETATION CONSERVATION BRANCH

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

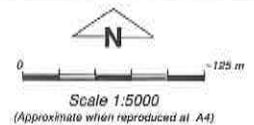
30 March 2012

Plan 4815/1



LEGEND

- Road Centrelines
- Cadastral Clearing Instruments
- Areas Approved to Clear
- Local Government Authorities
- Kulin 80cm Orthomosaic - Landgate 2005



Geocentric Datum Australia 1994
 Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

M. Warnock Date 30/3/12
 M. Warnock

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.: 4815/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Shire of Kulin

1.3. Property details

Property: LOT 15558 ON PLAN 173411 (KULIN WEST 6365)
Local Government Area: Shire of Kulin
Colloquial name: Kulin Dam Catchment

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 30 March 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
Beard Vegetation Association: 960 - Shrublands; mallee scrub, redwood & black marlock (Shepherd, 2009)	<p>The application is to clear up to 26.68 hectares of native vegetation from Lot 15558 on Plan 173411 (Reserve 25777), for the purpose of re-establishing the water catchment area to increase surface water runoff into an existing town dam.</p> <p>The application area has been previously cleared for this purpose, with the dam and catchment area having been established in the 1950s (Water Corporation, 2012). The Water Corporation has ceased using the dam and the Shire intends to take it over and use the water for school oval /community recreation area irrigation purposes (Shire of Kulin, 2012).</p> <p>Currently the dam is inefficient due to the lack of maintenance of the roaded catchment and the re-growth (Shire of Kulin, 2012). The Shire intends to chain and burn the area. It then intends to upgrade the roaded catchments to improve water collection and run-off and maintain the catchment in a clear state for the future (Shire of Kulin, 2012).</p> <p>It is unknown how many times the area has been cleared and when this last occurred, however the Water Corporation estimates the area ceased to be used in the 1970s or 80s and the Shire of Kulin suggests clearing was probably last undertaken 15 to 18 years ago.</p> <p>The area proposed to be cleared consists of old formed degraded roaded catchment that flows in a northerly direction, then down the main drains into the dam (Shire of Kulin, 2012). The re-growth is both on the top and bottom of the roaded catchments with the heavier re-growth at the western end (Shire of Kulin, 2012). The middle section of the application area is lower re-growth (Shire of Kulin, 2012). The cleared water catchment area is regenerating and is considered to be in very good to degraded (Keighery, 1994) condition.</p>	<p>Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994)</p> <p>To</p> <p>Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994)</p>	<p>Vegetation condition was determined through aerial imagery and photographs provided by the applicant (Shire of Kulin, 2012).</p>

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 up to 26.68 hectares of native vegetation for the purpose of re-establishing a previously cleared catchment area for a dam in the town of Kulin.

The vegetation under application is regenerating after historic clearing for water catchment purposes and is considered to be in very good to degraded (Keighery, 1994) condition. It is considered that the vegetation is approximately 10 years old (CSLC, 2012), however it may be older.

The local area (20 kilometre radius) has been extensively cleared for agriculture, with approximately 5 per cent native vegetation cover remaining. Furthermore, the proposed clearing is of an under-represented vegetation type, with the mapped vegetation type (Beard Vegetation Association 960) retaining approximately 14 per cent (30,390 hectares) of the pre-European extent within the Mallee IBRA bioregion (Shepherd, 2009).

The application area is adjacent to two significant (165 hectare and 35 hectare) remnants of native vegetation that appear to be in better condition than that under application. These remnants are located on private and water reserve land. The proposed clearing will reduce connectivity between the remnants, which may impact upon the ecological function of this vegetation. Additionally, disturbance whilst undertaking clearing activities poses a high risk of introducing or spreading weeds to the surrounding environment and could degrade the adjacent remnant vegetation.

Within 500 metres of the application area there are records of 13 species of priority flora on the same mapped vegetation and soil types as the vegetation under application. The vegetation under application may support suitable habitat for these species, the following three of which are Priority 1 species.

- In 2004 *Acacia* sp. Kulin (S. Murray 504) was first recognised as a new species and was added to the Priority flora list the following year. This species inhabits hillsides and road verges with yellow-brown sandy loam with gravel over laterite, brown sandy gravel or loamy clay (Western Australian Herbarium, 1998-). Records indicated that a roadside population was destroyed and therefore it is now only known from a single location within the Water Reserve at Kulin (R25777) where, in 2004, 871 plants were recorded within an area of regenerating vegetation which was previously cleared for water catchment purposes. If this population was to be destroyed by direct or secondary impacts of clearing it would represent the extinction of the species.
- *Acacia lanei* (P1) has been recorded approximately 15 metres south of the application area, on private property that is separated from the application area by a road. The vegetation and soil types in this area are the same as the types mapped over the application area. The 2001 record is from a roadside creekline that was disturbed by roadworks in 2000. Considering the proximity and same mapped vegetation and soil types, the application area may support this taxon.
- *Brachyloma delbi* (P1) is considered to be an extremely restricted species and is known from a few records within the Kulin town site. It has been recorded on disturbed sites such as gravel pits and drainage channels on the same mapped vegetation and soil types as the application area. The closest known record is 65 metres west of the previously cleared water catchment area. There is another record in the eastern side of the water reserve, close to the existing dam. The application area may support this taxon.

The applicant modified the application during assessment, removing an approximately 7 hectare area supporting the known population of *Acacia* sp. Kulin (S. Murray 504) from the application in order to avoid impacts to this species. This area is also likely to support suitable habitat for *Acacia lanei*, *Brachyloma delbi* and other priority flora species known from the area and neighbours the 165 hectare remnant. The remainder of the application area may also provide suitable habitat for these species.

Despite the historic clearing of the application area and the adjacent vegetation being likely to support higher biodiversity values, the vegetation under application is considered to comprise a high biodiversity value in the highly cleared landscape and the proposed clearing is therefore at variance to this principle. Weed control measures and appropriate offset will assist in mitigating these impacts.

Methodology

References:

Keighery, 1994

Shepherd, 2009

Shire of Kulin, 2012

Western Australian Herbarium, 1998-

GIS Databases:

- Kulin 80cm Orthomosaic - Landgate 2005

- NLWRA, Current Extent of Native Vegetation - DEC 08/11

- Pre-European Vegetation - DA 01/01

- SAC Biodatasets - 01/12
- Soils, Statewide - 11/99

(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

The vegetation under application is regenerating after historic clearing for water catchment and is considered to be in very good to degraded (Keighery, 1994) condition. It is considered that the vegetation is approximately 10 years old (CSLC, 2012), however it may be older.

There are records of four threatened fauna species occurring in the local area (20 kilometre radius), being the *Dasyurus geoffroii* (Chuditch), *Leipoa ocellata* (Malleefowl), *Myrmecobius fasciatus* (Numbat) and *Phascogale calura* (Red-tailed Phascogale) (DEC, 2007-). Due to the level of disturbance from previous clearing affecting the vegetation under application, it is considered to have a reduced fauna habitat value. However the vegetation is regenerating and supports a vegetation type that is considered to be suitable potential habitat for these species.

The vegetation under application is part of a large remnant of native vegetation in a local area that is approximately 95 per cent cleared. The vegetation adjacent to the application area appears to be in better condition than the application area and is considered to be significant habitat for indigenous fauna. The proposed clearing of approximately 26.68 hectares would fragment the remnant into two separate areas that are unconnected except for an area approximately 10 metres wide at one location.

Considering the above, the proposed clearing will impact upon the connectivity between two areas of high quality significant habitat and may be at variance to this principle. Appropriate offset will assist in mitigating these impacts.

- Methodology** References:
- CSLC, 2012
 - DEC, 2007-
- GIS Databases:
- Kulin 80cm Orthomosaic - Landgate 2005
 - NLWRA, Current Extent of Native Vegetation - DEC 08/11
 - SAC Biodatasets - 01/12

(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

The closest known record of declared rare flora is *Conostylis rogeri*, located 12.9 kilometres south east of the proposed clearing area, within the Hopkins Nature Reserve. This record is on a different vegetation type to the vegetation under application.

The vegetation under application is not likely to support suitable habitat for declared rare flora in the local area and therefore, is not likely to be at variance to this principle

- Methodology** GIS Databases:
- Pre-European Vegetation - DA 01/01
 - SAC Biodatasets - 01/12
 - Soils, Statewide - DAFWA 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 known records of threatened ecological communities within 20 kilometres of the application area and the proposed clearing is therefore not likely to be at variance to this principle.

- Methodology** GIS Databases:
- SAC Biodatasets - 01/12

(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 at variance to this Principle

The vegetation under application is mapped as Beard Vegetation Association 960 which retains approximately 14 per cent (30,390 hectares) of the pre-European extent within the Mallee IBRA bioregion (Shepherd, 2009). Approximately 35 per cent (10,494 hectares) of the current extent is held in conservation estate (Shepherd, 2009).

The Shire of Kulin is highly cleared, with approximately 15 per cent (69,089 hectares) of the pre-European vegetation cover remaining (Shepherd, 2009), and there is approximately 5 per cent native vegetation cover remaining within the local area (20 kilometre radius).

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).

The vegetation under application is re-generating after historical clearing for a water catchment area and is considered to be in very good to degraded (Keighery, 1994) condition. Whilst application area has been reduced and modified in order to avoid impacts to the only known population of the Priority 1 flora species *Acacia* sp. Kulin (S. Murray 504) the remainder of the application area may also provide suitable habitat for this and other priority flora.

Additionally, the application area is part of a large remnant of native vegetation on the outskirts of the Kulin townsite. There is approximately 165 hectares of remnant vegetation on private property to the immediate west of the application area and the eastern portion of the water reserve supports approximately 35 hectares of remnant vegetation. This vegetation is in better condition than that within the application area. The application area is approximately 700 metres wide and joins the two adjacent remnants into one continuous block of remnant vegetation. The proposed clearing would fragment this remnant into separate east and west blocks, with connectivity between the two remnants reduced to a 10 metre wide point at one location.

Considering the above, the vegetation under application is significant as a remnant of native vegetation in an area that has been extensively cleared and the proposed clearing is at variance to this principle. An appropriate offset will assist in mitigating these impacts

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				
Mallee	7,395,897	4,115,655	56	31
Shire*				
Shire of Kulin	471,820	69,089	15	36
Beard Vegetation Association in Bioregion*				
960	220,470	30,390	14	35 (10,494ha)

*Shepherd, 2009

Methodology References:
Commonwealth of Australia, 2001
Shepherd, 2009
GIS Databases:
- Kulin 80cm Orthomosaic - Landgate 2005
- NLWRA, Current Extent of Native Vegetation - DEC 08/11
- Pre-European Vegetation - DA 01/01
- Town Planning Scheme Zones - MFP 08/98

(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

There are three branches of a minor non-perennial watercourse within the application area, which meet at the eastern end of the application area to form one of two watercourses that drain into the dam, approximately 200 metres to the east.

There are existing roaded catchment drains across the application area which drain water northwards into the main drains that feed the dam (Shire of Kulin, 2012).

Considering the above, the proposed clearing includes vegetation growing in association with a watercourse and is therefore at variance to this principle. An appropriate offset will assist in mitigating these impacts.

Methodology References:
Shire of Kulin, 2012
GIS Databases:
- Hydrography, linear - DoW 07/06
- Kulin 80cm Orthomosaic - Landgate 2005

(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

Soils in the application area are described as the Corrigin 3 undifferentiated phase (map unit 259Co_3u) which includes colluvial and residual mantle, gently undulating slopes, with acid to neutral duplexes on upper to mild slopes and neutral to alkaline duplex and clays in lower positions (CSLC, 2012).

Salinity is occurring approximately 5 kilometres to the north of the application area, in another catchment and approximately 10 kilometres east, associated with the Jilakin Lake system (CSLC, 2012). Approximately 86 per cent of the 259Co_3u map unit has nil or partial salinity risk. No salinity is occurring on the property and no significant change is expected if the proposed clearing occurred (CSLC, 2012).

Due to the soil types present, the Commissioner of Soil and Land Conservation (2012) considers that the risk of land degradation from the proposed clearing is low and the proposed clearing is not likely to be at variance to this principle.

Methodology References:
CSLC, 2012

(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

There is one Department of Environment and Conservation (DEC) managed reserve in the local area (20 kilometre radius), with the Kulin Road Nature Reserve located approximately 5.6 kilometres northwest of the application area.

Considering the distance and the level of disturbance within the application area, the proposed clearing is unlikely to impact the environmental values of the Kulin Road Nature Reserve and is not likely to be at variance to this principle.

Methodology GIS Databases:
- DEC Managed Lands and Waters - DEC 06/11
- Kulin 80cm Orthomosaic - Landgate 2005

(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 vegetation under application is re-growth in a historically cleared water catchment area. The proposed clearing of native vegetation will increase surface water flow, which will be drained into an existing dam.

There are three branches of a minor non-perennial watercourse within the application area. There are existing roaded catchment drains across the application area which drain water northwards into these watercourses (Shire of Kulin, 2012). The three branches meet at the eastern end of the application area to form one of two watercourses that drain into the existing supply dam, approximately 200 metres to the east.

Salinity is occurring approximately 5 kilometres to the north of the application area, in another catchment and approximately 10 kilometres east, associated with the Jilakin Lake system (CSLC, 2012). Approximately 86 per cent of the 259Co_3u map unit has nil or partial salinity risk. No salinity is occurring on the property and no significant change is expected if the proposed clearing occurred (CSLC, 2012).

Considering the above, the proposed clearing may increase sedimentation of the drainage lines within the application area. However as these watercourses are surface water catchment lines that fill a constructed dam the proposed clearing is not considered likely to impact upon water quality downstream and is not likely to be at variance to this principle.

Methodology References:
CSLC, 2012
Shire of Kulin, 2012
GIS Databases:
- Hydrography, linear - DoW 07/06

(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 vegetation under application is re-growth in a historically cleared water catchment area. There is drainage infrastructure in place to drain surface water flows into an existing water supply dam.

Considering the above the proposed clearing is not likely to impact flooding.

Methodology GIS Databases:
- Hydrography, linear - DoW 07/06

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

Comments

The property is reserved under management order to the Water Corporation for the purpose of 'water supply' and is zoned for 'public purposes'.

The dam and catchment area were established by the Water Corporation in the 1950s (Water Corporation, 2012) as a backup town dam. The Water Corporation now has no need for the dam and has allowed the Kulin High School to use it to irrigate the school oval (Shire of Kulin, 2012). The Shire advised that the dam went dry last year and the school had to make other arrangements for its water requirements. The Shire intends to enter into a licence agreement with the Water Corporation to use the water for its recreation watering requirements, including the school oval (Shire of Kulin, 2012).

The Shire of Kulin has advised it does not have a documented water supply plan and does not currently have a plan for a waste water recycling facility, however has been pursuing this option for several years (Shire of Kulin, 2012). For the meantime the Shire intends to re-establish the existing dam and catchment area in order to reduce reliance on scheme water, and this plan has been put to Council (Shire of Kulin, 2012).

The Water Corporation has no objection to the proposed clearing within the roaded catchment and has advised that the Shire will be allowed to take water from the dam under a licence agreement (Water Corporation, 2012).

The application was to clear up to 40 hectares of regenerating vegetation within the existing water catchment area, however the Shire of Kulin revised this amount down to 26.68 hectares during assessment in order to minimise environmental impacts.

A public submission was received in objection to the proposed clearing on the basis that there must be alternatives to the clearing of 40 hectares of vegetation for a water catchment (Submission, 2012). This has been considered and is addressed in the above.

The application area is within the area covered by the EPA Position Statement No.2, which concludes that further clearing for agricultural purposes should not be considered. The proposed clearing is for the purpose of water supply.

There are no known Aboriginal Sites of Significance within the application area.

Methodology References:
Shire of Kulin, 2012
Submission, 2012
Water Corporation, 2011
GIS Databases:
- Aboriginal Sites of Significance - DIA 02/10
- EPA Position Paper No 2 Agricultural Region - DEP 12/00
- Town Planning Scheme Zones - MFP 08/98

4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- CSLC (2012) Clearing Permit Application CPS 4815/1 - Land Degradation Advice. Received 22/02/2012. Commissioner of Soil and Land Conservation, Department of Agriculture and Food, Western Australia. DEC Ref: A477162
- DEC (2007 -) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>. (Accessed 16/02/2012)
- 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. (2009) 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.
- Shire of Kulin (2012) Application for Clearing Permit CPS 4815/1 and Supporting Information. DEC Ref: A464709; A475869; A483609
- Submission (2012) Clearing Permit Application CPS 4815/1 - Public Submission. Received 29/01/2012. DEC Ref: A469530
- Water Corporation (2011) Support for Clearing of Native Vegetation for Dam Catchment and Additional Information. DEC Ref: A464709; A484458
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/> (Accessed 07/03/2012)

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)