# Clearing of native vegetation Offsets procedure

Under the Environmental Protection Act 1986

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Accessibility This document is available in alternative formats upon request.

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## **Purpose**

This procedure is provided to assist applicants in the design of an offset proposal where required as a condition of a clearing permit under Part V Division 2 of the *Environmental Protection Act 1986* (EP Act).

## Introduction

Environmental offsets are actions that provide environmental benefits which counterbalance the significant residual impact of an activity, such as clearing native vegetation. Offsets are undertaken outside of the clearing area and should establish or maintain the native vegetation in a parcel of land. Offsets may include rehabilitation and revegetation or acquisition of land with a secure conservation purpose.

Offsets are required when a clearing application is determined by the Department of Environment Regulation (DER) or Department of Mines and Petroleum (DMP) to be at variance with one or more of the biodiversity related clearing principles (principles a – f, h) and a significant residual impact remains following application of the mitigation hierarchy. The clearing principles are contained in Schedule 5 of the EP Act. For further information on the assessment of clearing applications, please refer to 'A Guide to Assessment of Applications to Clear Native Vegetation' from DER's website www.der.wa.gov.au/nvp.

To ensure offset proposals submitted to DER or DMP meet the requirements of the <u>State Environmental Offsets Policy</u> and <u>State Environmental Offsets Guidelines</u>, guidance on the matters taken into consideration under each policy principle is provided in <u>Appendix A</u>. This information should assist applicants in preparing their offset proposal.

Where an application to clear is assessed under a bilateral agreement with the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999*, consideration of the Commonwealth's EPBC Act environmental offsets policy and Offsets assessment guide may also be required.

Appendix A provides an example of the information you should provide (as a minimum) and how to present your offset proposal for assessment.

- If insufficient information is provided you may be requested to provide more detail.
- 2. If the proposed offset includes revegetation, a revegetation plan should be submitted with the *Clearing permit offset proposal form*, located in <u>Appendix A</u>.
- 3. A guide to preparing revegetation plans is available from <a href="https://www.der.wa.gov.au/nvp">www.der.wa.gov.au/nvp</a>.
- 4. For more information contact DER on 6467 5000.

## Legislation

Under section 51H(1)of the EP Act, the Chief Executive Officer (CEO) may grant a clearing permit that is subject to conditions the CEO considers to be necessary or convenient for the purposes of preventing, controlling, abating or mitigating environmental harm or offsetting the loss of the cleared vegetation.

The types of conditions that can be placed on a clearing permit are outlined in section 51I and include offsets.

511 Some kinds of conditions

(2) (b) establish and maintain vegetation on land other than land cleared under the [clearing] permit in order to offset the loss of the cleared vegetation, or make monetary contributions to a fund maintained for the purpose of establishing or maintaining vegetation.

The EP Act also allows for the giving of a conservation covenant or other form of binding undertaking for the purpose of establishing or maintaining vegetation as a condition of a clearing permit.

Offsets are required when clearing is at variance with one or more of the biodiversity related clearing principles (principles a – f, h) and a significant residual impact remains.

## Implementation

DER or DMP will advise the applicant if a clearing application has a significant residual impact and therefore requires an offset after an assessment has been undertaken.

Once advised, applicants should discuss their offset proposal with DER or DMP, and then submit their offset proposal using the procedure available in <u>Appendix A</u>.

The department will assess the acceptability of the offset proposal with regard to the State Environmental Offsets Guidelines.

DMP has delegated authority from the CEO of DER to regulate clearing of native vegetation for mining and petroleum related activities under the *Mining Act 1978*, various Petroleum Acts and State agreements administered by the Department of State Development.

The CEO's decision to grant a clearing permit and or any conditions on a clearing permit are open to appeal by the applicant or third parties. The Minister for Environment will consider the appeal(s) and make the final determination.

## Commencement

This Procedure is to take effect from 1 August 2014.



## Government of **Western Australia**Department of **Environment Regulation**

## **Appendix A**

## Clearing permit offset proposal form

Environmental Protection Act 1986

1. Occupier's details	
Date: Clearing permit application number:	CPS 10544/1
Applicant:	
Phone numbers:	
Email:	
Contact person or environment	ental specialist:
Name:	
Company:	
Phone numbers:	
Email:	
Environmental specialist's qualifications or equivalent, and relevant experience:	
Purpose of clearing:	road upgrade
Land details of the clearing application area:	Multiple land parcels as per attachment to application
Total area of the proposed clearing (hectares):	4.79 ha

2. Proposed on site mitigation (if applicable)		
Area (ha) / number of trees to be planted:	N/A	
Other on ground management actions proposed:	N/A	
Future tenure and/or zoning:  (e.g. a conservation covenant will be placed on the certificate of title after sand mining and rehabilitation is undertaken)	Road reserve	

Estimated future vegetation condition (Keighery scale):	
Proposed commencement date of rehabilitation and revegetation:	
Proposed completion date of rehabilitation and revegetation: (date by which the benefit for the species/vegetation community impacted has been achieved)	
Is a revegetation plan attached?	
Is the spatial data for the location of on site mitigation provided (ESRI shapefile format)?	
Estimated cost of mitigation (on site rehabilitation and revegetation):	

3: Proposed offset site (off site location)	
Land details:	
Area (ha) or number of trees at site prior to offset being undertaken:	11.825 ha of Woodlands TEC available
Type of offset: (rehabilitation and revegetation, on ground management or land acquisition)	land acquisition (transfer to conservation estate) with on-ground management
Current scheme zoning: (region or local scheme)	rural
Are there any development approvals? (for example, extractive industry license or Environment Protection and Biodiversity Conservation Act 1999 approval)	No
Future tenure and/or zoning:  (e.g. proposed to change local council reserve from recreation to conservation purposes)	rural
Current vegetation condition (Keighery scale):	Pristine to Excellent
Future predicted vegetation condition, if rehabilitation and revegetation or other on ground management are being carried out as part of the offset proposal (Keighery scale):	Pristine to Excellent
Proposed commencement date of rehabilitation and revegetation and/or other on ground management:	2 years estimated to complete purchase

Proposed completion date of rehabilitation and revegetation and/or other on ground management: (date by which the benefit for the species/vegetation community impacted has been achieved)	2 years to ecological benefit
Proposed date of land acquisition or method of securing the tenure of the site:	acquisition and transfer to DBCA estate
Is the environmental survey of the offset site attached?	Yes
Is a revegetation plan attached (if required)?	N/A
Is the spatial data for the location of the offset site provided (ESRI shapefile format)?	Yes
Is the spatial data for the environmental survey of the offset site provided (ESRI shapefile format) (vegetation condition and type, locations of habitat trees)	Yes
Estimated cost of the offset:	

- 4. Information demonstrating that the offset policy principles have been addressed (if you require more space for this section, please attach separate documents)
- 1.Environmental offsets will only be considered after avoidance and mitigation options have been pursued.

Please explain how the significant impacts of the project (as identified by DER or DMP in the preliminary assessment report provided to the applicant) have been avoided and/or minimised. You should explain how each of the mitigation hierarchy steps (avoid, minimise, rehabilitate) have been applied to address each significant impact (that is, each clearing principle that is at variance), from the original proposed clearing application area through to the current proposed clearing application area. Offsets are only applied to the significant residual impact that remains after these steps have been taken.

## Refer to section 5.1 of NVCP Supporting Document:

The alternatives to avoid or minimise the need for clearing of vegetation within this application is somewhat limited as it is associated with the upgrade, maintenance and safety of an existing public road. The alternative (which is not feasible) would be to construct another road elsewhere which would require significantly more disturbance and more borrow pits to source additional road base volumes, further increasing clearing requirements.

The design of the road in terms of width and alignment reflects new standards and safety requirements to meet the future increase in large truck and other vehicle movements on this road. To meet the standards required by the Shire, Main Roads and Austroads. There were geometric considerations which included road width and the gradient of steep hills. Specific actions to reduce the need for clearing associated with these considerations included the redesign of drains to make them shallower thereby reducing footprint, Teepened batters to reduce clearing and wherever possible have maintained the road within the cleared corridor; all minimum standards that will avoid further intrusion onto the landscape. Where possible trees will be left if they are in the drain area not impacting the safety aspects of the road.

Careful consideration to road alignment and sensitivity to adjacent vegetation and priority species has also been given to mitigate impacts. Intensive traffic management will be implemented to safely divert all traffic around the construction activities but within the road footprint removing the need for a separate diversion road adjacent to the road upgrade activities. This aspect alone significantly mitigates impacts to environmental values.

2. Environmental offsets will be cost-effective, as well as relevant and proportionate to the significance of the environmental value being impacted.

You should explain how the proposed offset will address each of the impacts described under the biodiversity related clearing prinicple(s) that the application is at variance to (as outlined in the DER or DMP preliminary assessment report provided to the applicant). Under each principle at variance, you should provide information on each environmental value that may be removed or decline as a result of the clearing and how the offset will provide equivalent or better replacement for these values (e.g. fencing the site, other habitat provided, etc.)

It is preferable that the design of an offset leads to a net gain in size, density and diversity of native vegetation and an overall improvement in the condition of the natural environment and the specific environmental values requiring offsetting. Please include information on how your offset has given consideration to ecosystem function, rarity, connectivity, vegetation condition, habitat quality and the type of ecological community cleared.

The requirement for 'equivalent or better replacement' is the key to successfully addressing this offset principle. For example, if breeding habitat (trees with hollows) for Carnaby's cockatoo is cleared then it is not appropriate to propose feeding habitat as an offset.

You may also provide information detailing expertise and demonstrated success in rehabilitation of the same vegetation type.

Section 3 of the NVCP Supporting document provides and assessment of the impact against the Ten Clearing Principles of the EP Act. Appendix C provides the surveys of the offset site; while Appendix D provides the rationale for the offsets.

In summary the Principles for which clearing may be at variance; and the rational for the offsets are described below as well as in the NVCP Supporting document and appendices.

(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.

The proposal will impact 0.40 ha of 'Eucalypt Woodland of the Western Australian Wheatbelt' PEC (Priority 3), synonymous with the Commonwealth listed TEC (of the same name), which occurs in this location in thin strips of roadside vegetation. The quality of the vegetation has been mapped as predominantly excellent condition (Keighery scale in EPA 2061).

An offset property has been identified that provides a large intact portion of native vegetation contiguous with Chiddarcooping Nature Reserve (R 19210). The proposed offset site contains approx. 11.8 ha of mapped Eucalyptus Woodland PEC in similar or better quality. In using the offset calculator (Appendix D) the required offset for clearing of 0.40 ha of PEC/TEC is 0.8 ha. Given that the proposed offset site is currently in private ownership, acquisition and use of transfer to DBCA Conservation estate or use of conservation covenant will provide protection in perpetuity of this land and enable on-ground management to ensure vegetation quality / fauna habitat values are maintained and do not degrade if otherwise left in private ownership (e.g., weed control, fire and feral pest management, maintenance of fencing to prevent unauthorised vehicle access).

The provision of land contiguous with nature reserve and no intersecting roads provides for continuous fauna movement corridors compared to the impact site, where the vegetation is largely thin strips either side of a public road, subject to edge effects and limited control on vehicle access within these areas.

(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.

The impact site contains roadside vegetation proposed to be impacted by road upgrade works, including widening; and drainage works that will require clearing. This native vegetation of which a portion is TEC, is located within an agricultural region that has been extensively cleared; and is largely preserved within road reserve (with limited future protection) within the proposal area.

The proposed offset property as noted above, provides for a large intact portion of native vegetation continguous with Chiddarcooping Nature Reserve (R 19210) that contains similar and better quality flora and vegetation and fauna habitat values to the impact site. The purchase and placement of this land into conservation estate (DBCA or via conservation covenant) will ensure ongoing on-ground management to prevent future degradation (through threatening processes such as weeds, disease, feral animals, fire and unauthorised access).

### 3. Environmental offsets will be based on sound environmental information and knowledge.

Describe how the environmental specialist has been involved in the design of the offset proposal and how and when an environmental specialist will be involved in the implementation and monitoring of the offset.

An 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 is required under the clearing permit and offset proposal.

You must describe the methodology for determining the components of an offset proposal. For example, this may include the identification of a suitable site based on landform, soil, proximity, species composition and relationship to the environmental values impacted.

If your offset includes rehabilitation and revegetation, please provide evidence of how the completion criteria were determined as appropriate and evidence of your ability to successfully meet those criteria. (Note. You may refer to the revegetation plan rather than repeat information)

The search for a suitable offset site has been undertaken by Covalent Lithium's Environmental Manager, on behalf of the Shire of Yilgarn, utilising the expertise and advice of experienced botanical and zoological consultants familiar with the region.

The consideration of the offset site was initially based on looking for site(s) with similar landform, soils and flora and vegetation composition that would support species (flora and fauna) known to occur within the impact site; in particular that meets the criteria for Eucalypt Woodland of the Western Australian Wheatbelt PEC (State) /TEC (Cth). Other criteria for consideration was the availability of the site for purchase and ensuring not only like for like; but also achieving a net-gain in available flora/vegetation and fauna habitat (Chuditch and Malleefowl) through an acquired offset.

Once a suitable site was located, Western Botanical and Ecoscape were commissioned to undertake relevant flora and vegetation; and terrestrial fauna surveys respectively, to determine the values of the preferred site to confirm if suitable to offset the values of the impact site; and to provide details to support a determination quantification of likely offset values.

The ecological surveys for the offset site are provided in Appendix C of the NVCP supporting documentation; and then the consideration of quantum of offsets and the rational for this (based on DWER guidance) is provided in Appendix D.

Covalent are assisting the proponent (Shire of Yilgarn) with negotiations with the landholder and DBCA regarding purchase and suitability of the offset site for conservation estate and agreed management actions that will be required for this land. An MOU between Covalent Lithium and DBCA is in progress to document the agreed actions for acquisition, transfer and ongoing management of conservation offsets. (Refer to Appendix E of the NVCP supporting document).

#### 4. Environmental offsets will be applied within a framework of adaptive management.

Adaptive management involves defining the problem, establishing goals, implementing the action (including monitoring plans), evaluating the results and adapting in response to new information. For environmental offsets, this principle primarily relates to rehabilitation and revegetation or on ground management of native vegetation.

An adaptive management approach requires that contingency measures are in place to respond if monitoring determines an offset is not on track to meet completion criteria.

You should briefly describe the following (detailed information should be provided in the revegetation plan):

- Objectives
- Brief description of how the offset will be implemented (including timeframes)
- Monitoring techniques and timeframes
- Contingencies (e.g. monitoring results may trigger infill planting to ensure rehabilitation is successful).

The objective of the offset is to provide a net gain in available flora and vegetation and faunal habitat values, and in particular protection of otherwise unprotected areas of Eucalypt Woodland of the Western Australian Wheatbelt PEC (State) /TEC (Cth) as well as habitat for Chuditch and Malleefowl.

The offset will be implemented through the acquisition of privately owned land containing the desired environmental values, and transferring this into conservation estate in perpetuity. The preferred pathway is to have it transferred into DBCA conservation estate, as it is adjacent to an existing conservation reserve, which will enable on contiguous on-ground management of a broader area than just the offset site. The alternative will be to apply for a conservation covenant over the title to ensure protection in perpetuity.

It is anticipated that this process will be completed over the next 12 to 18 months and it is estimated that the timeline for completion of transfer of this property to conservation estate (either DBCA managed lands or to conservation covenant) will be in the order of 1 to 2 years from purchase.

Ongoing management of the offset site will be undertaken in accordance with a MOU with DBCA, and will include as a minimum:

- Annual inspection and maintenance of fencing to ensure exclusion of unauthorised vehicles, stock and feral animals;
- Weed inspection (at least annually post winter rainfall) and weed control programmes as required; and
- At least annual inspection of fire breaks prior to fire season; and maintenance to reduce fire risk.

Contingencies will be related to outcomes of inspections or reported issues, in particular:

- fencing repairs within 4 weeks of identified damage (subject to fencing contractor availability);
- feral animal control in consultation with, and on advice of, DBCA and adjacent landowners as required;
- weed control (spraying) later winter/early spring with further inspection within up to 4 weeks post spraying (or other control method) to ensure success;and
- increased maintenance of fire breaks if required.

No re-vegetation planting is proposed for either site. It is anticipated that cleared areas within the road verge at the impact site, will regenerate from topsoil and vegetative material. Wherever possible (considering road safety requirements), mature trees will be retained along the road alignment.

#### Environmental offsets will be focused on longer term strategic outcomes.

Before an offset can be approved, you must ensure that any other licences or approvals that are required have been obtained, and provide evidence of these. Examples include a letter of support from the landowner of an offset acquisition, a copy of the applicant's licence to collect seed or a licence to relocate fauna.

Explain what management processes will be implemented to ensure that there is an environmental benefit achieved over the longer term. You must be able to demonstrate that the tenure of the offset is secure and provides a long term conservation benefit for the environmental value/s impacted by the clearing. For example, an offset may be based on the types of actions proposed in a species recovery plan but additional to work already undertaken by the Department of Parks and Wildlife or land manager and not part of normal responsibilities.

#### Approvals

Covalent Lithium on behalf of the Shire of Yilgarn are currently negotiating with the private landholder to acquire the offset site; and developing an MOU with DBCA for management of land transferred to DBCA conservation estate (refer to Appendix E of the NVCP supporting document).

#### Management Processes

The adapative management processes for the offset site are described in Section 4 above, and are intended to ensure that the values of the offset site do not degrade over time, but are maintained and or improved as a result of it being transferred into conservation estate. These actions will be incorporated into an MOU with DBCA, with the actions funded by Covalent Lithium on behalf of the Shire of Yilgarn.

The protection of remnant vegetation in perpetuity and the proposed management actions are consistent with the current conservation advice and/or recovery plans and threat abatement plans (dieback, cats, rabbits, foxes) respectively, in particular:

Department of Environment and Conservation (2012). Chuditch (Dasyurus geoffroii) Recovery Plan. Wildlife Management Program No. 54. Department of Environment and Conservation, Perth, Western Australia

- retain and improve habitat critical for survival; and
- continue, expand and improve bating of foxes and feral cats.

Benshemesh, J. (2007). National Recovery Plan for Malleefowl. Department for Environment and Heritage, South Australia

- retain areas that support Malleefowl and Malleefowl habitat and protect them from incremental clearing;
- encourage landholders to enter into conservation covenants or similar agreements;
- remove goats and sheep from conservation reserves;
- erect and maintain adequate fencing to protect Malleefowl habitat;
- reduce rabbit numbers;
- reduce fire threats and provide for access to and adequate protection of small habitat remnants to prevent fire spreading to or from surrounding land;
- reduce predation fox and cat control; and
- develop strategic corridors of native vegetation to connect patches of habitat that are suitable for Malleefowl.

Department of the Environment (2015). Approved Conservation Advice - Appendices for the Eucalypt Woodlands of the Western Australian Wheatbelt. Canberra: Department of the Environment

Management of key threatening processes relevant to the Woodlands, including:

- Competition and land degradation by rabbits;
- Dieback caused by the root-rot fungus (Phytophthora cinnamomi);
- Land clearance;
- Loss and degradation of native plant and animal habitat by invasion of escaped garden plants
- Predation by European red fox and feral cats
- Predation, habitat degradation, competition and disease transmission by feral pigs

5. Ongoing commitments and consultation		
Monitoring commitment (including costs): (Note: you may refer to the revegetation plan here, if applicable, rather than repeat information.)	Refer to Appendix E MOU between Covalent Lithium and DBCA and section 6.2.4 in which it is described that all financial requirements associated monitoring and management associated with this Offset Strategy will be funded by Covalent on behalf the Shire of Yilgarn, who will be responsible to ensure that sufficient provision is made in corporate accounts to appropriately fund the implementation (including personnel and equipment), monitoring, management and reporting required by this Offset Strategy. Costs yet to be determined.	
Management commitment (including costs): (Note: you may refer to the revegetation plan here, if applicable, rather than repeat information.)		
Agencies or other organisations consulted and submissions received:	DBCA - refer to Appendix E MOU Shire of Yilgarn - application for clearing permit prepared by Covalent Lithium on behalf of the Shire of Yilgarn, and signed and approved by CEO of the Shire.  DWER feedback regarding CPS 10049/1, 10265/1, 101917/1 also issued for clearing on other sections of this road for the same purpose of road upgrade.	

6. Other	
Please note that contaminated site/s classified under the <i>Contaminated</i> Sites Act 2003 (past refuse disposal facilitates, maintenance yards) are not considered to be suitable offset sites	<b>√</b> Noted
You must ensure all laws are complied with (e.g. <i>Native Title Act 1993</i> ) and that necessary approvals are obtained (e.g. from landowner/s on which the offset will occur in the event that the subject land is not vested with the applicant) prior to submission.	<b>√</b> Noted
The agreed offset proposal document and revegetation plan may be published on the WA Environmental Offsets Register.	<b>√</b> Noted