



## **Appeals Convenor**

**Environmental Protection Act 1986**

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### **REPORT TO THE MINISTER FOR ENVIRONMENT**

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**APPEAL IN OBJECTION TO THE CONDITIONS APPLIED TO A CLEARING PERMIT  
BY THE DEPARTMENT OF WATER AND ENVIRONMENTAL REGULATION**

**CLEARING PERMIT CPS 8253/1: ROAD WIDENING, BAANDEE NORTH  
ROAD RESERVE**

**PERMIT HOLDER: SHIRE OF KELLERBERRIN**

Appeal Number 004 of 2020

**May 2020**

## Appeal summary

This report relates to an appeal lodged by the Wildflower Society of Western Australia (Inc) against the offset conditions applied to Clearing Permit CPS 8253/1. The permit, granted by the Department of Water and Environmental Regulation, authorises the Shire of Kellerberrin to clear about 2.84 hectares of native vegetation for the purpose of widening the Baandee North Road, subject to conditions.

The appellant submitted that the offset required for the proposed clearing is inadequate in area, and the revegetation component is also inadequate in the required species richness, to properly offset the loss of vegetation on Baandee North Road.

From the available information, the Appeals Convenor noted that:

- DWER identified the significant residual impacts of the proposed clearing to be 1.17 ha of native vegetation in predominantly 'good to very good' condition which is representative of the Wheatbelt Woodlands TEC (and comprises a significant remnant within an extensively cleared landscape) and a further 1.67 ha of native vegetation in predominantly 'good to very good' condition which comprises a significant remnant within an extensively cleared landscape
- DWER considered these significant residual impacts can be counterbalanced by changing the purpose of 11.4 ha of Crown Reserve 33419 to 'Conservation', which includes 5.75 ha of vegetation consistent with the Wheatbelt Woodlands TEC in 'excellent to pristine' condition and 5.65 ha of vegetation in 'excellent' condition, and revegetating 3.04 ha of Lot 306 to 'good' condition, using key species for the Wheatbelt Woodland TEC, and conserving this
- DWER assessed the offset suitability using the Commonwealth's *Offsets Assessment Guide*
- the permit holder's *Reference Site Survey – Revegetation Project on the Shackleton-Kellerberrin Rd Kellerberrin*, which DWER considered to be in line with its *A guide to preparing Revegetation Plan for Clearing Permits*, identifies a species richness of 28
- on review of DWER's offset calculations, it was considered that most of the scores applied by DWER can be justified within the context of the Commonwealth guidance, however the 'quality' scores applied in the calculations for the land acquisition component, and the 'quality' and 'risk of loss' scores applied in the calculation for the revegetation component, should be revised
- the clearing permit does not identify the location or extent of the offset site within Crown Reserve 33419, and does not identify the location of the offset site on Lot 306.

For the reasons stated in this report, the Appeals Convenor considered that DWER's offset calculations for aspects of both the land acquisition and revegetation components should be revised, and that on this basis the offset conditions should be strengthened.

### Recommendation

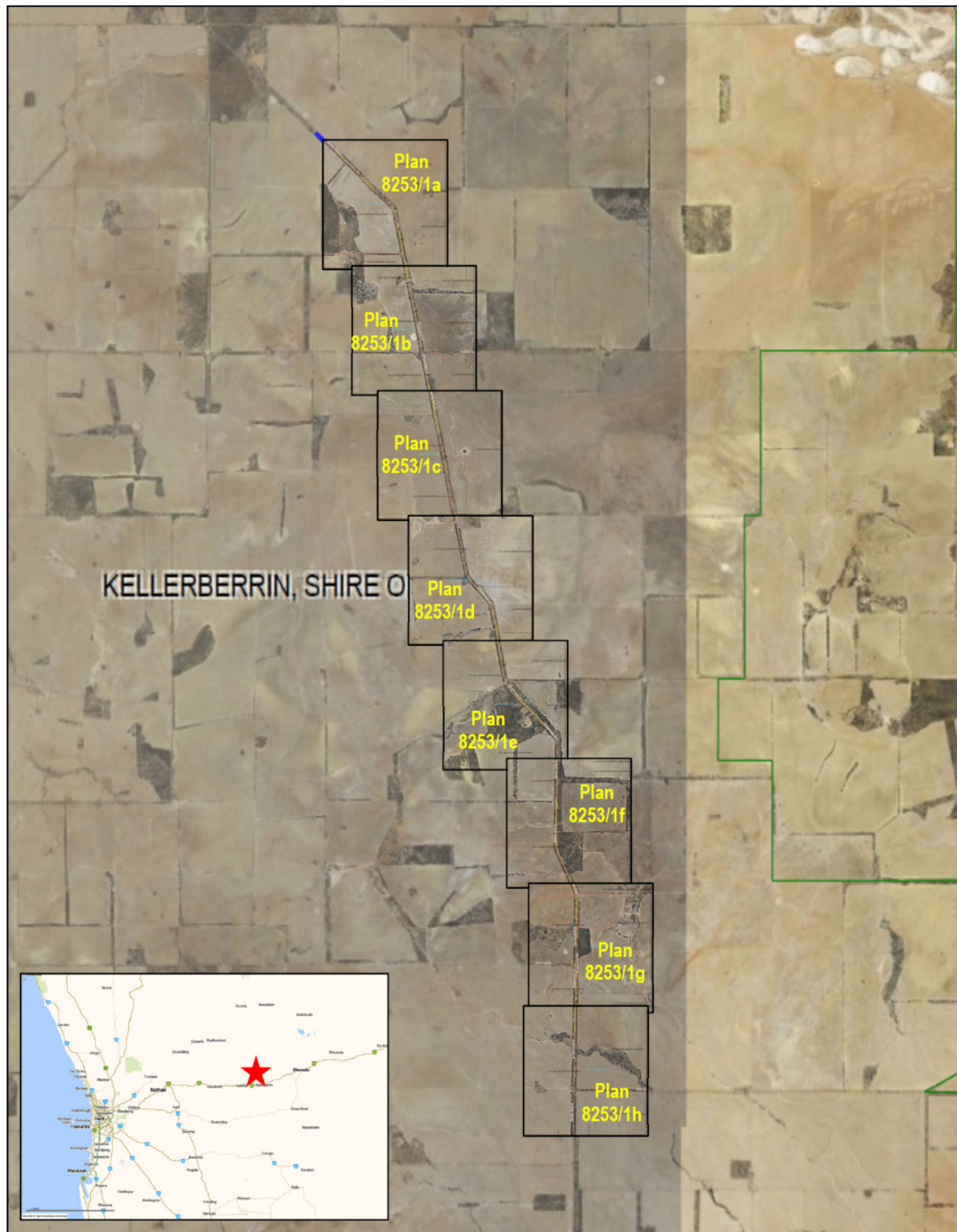
The Appeals Convenor recommended that the appeal is allowed to the extent that:

- condition 9 of the clearing permit is amended to state that 13.87 ha of Crown Reserve 33419 is attributed to the proposed clearing, which is to include:
  - 5.75 ha of native vegetation consistent with the Wheatbelt Woodlands TEC in 'good to very good' or better condition
  - 8.12 ha of other native vegetation in 'excellent' or better condition
- condition 11 of the clearing permit is amended to state that the permit holder must revegetate and rehabilitate 4.165 ha on Lot 306 on Deposited Plan 409422.

## INTRODUCTION

This report relates to an appeal lodged by the Wildflower Society of Western Australia (Inc) (appellant) against the offset conditions applied to Clearing Permit CPS 8253/1 (clearing permit) granted by the Department of Water and Environmental Regulation (DWER), authorising the Shire of Kellerberrin (permit holder) to clear 2.8393 hectares of native vegetation within the Baandee North Road reserve for the purpose of road widening, subject to conditions.<sup>1</sup> The location and extent of the clearing footprint is shown in Figure 1 (with clearing permit plans cited).

**Figure 1: Location (red star) and extent (yellow shading) of the clearing footprint**



(Source: DWER, CPS 8253/1 Context Map)

<sup>1</sup> Documents, clearing permit, plans and decision report available at: <ftp://ftp.dwer.wa.gov.au/permit/8253/>

## Background

On 14 November 2018, the permit holder applied for a 'purpose' permit to clear 5 ha of native vegetation for the purpose of widening the Baandee North Road. The permit holder subsequently refined the clearing footprint, thereby reducing the extent of the proposed clearing to 2.8383 ha.

DWER advised that the application was advertised for a 21-day public comment period, and that a submission was received from the appellant raising concerns about the impacts of the proposed clearing within a highly cleared and fragmented landscape, availability of flora and fauna surveys, cumulative impacts, and lack of consideration for alternatives to clearing. The decision report sets out the manner in which DWER had regard for the submission in its assessment.

DWER granted the clearing permit on 3 January 2020, subject to conditions including:

- limit clearing to 2.8393 ha, and not undertake clearing after 2 February 2025
- avoid, minimise and reduce the impacts and extent of clearing
- take steps to minimise the risk of the introduction and spread of weeds
- by 2 February 2021, provide DWER with evidence of the executed changes in purpose of:
  - Crown Reserve 33419 from 'Gravel' to 'Conservation'
  - Lot 306 on Deposited Plan 409422 (freehold) to 'Conservation'
- within 12 months of the commencement of clearing and no later than 2 February 2021, implement the permit holder's *Revegetation Plan for Lot 306 on Deposited Plan 409422*<sup>2</sup> (revegetation plan)
- keep records in relation to activities done under the clearing permit, and report on these annually.

DWER advised that its decision to grant the clearing permit took into account the following:

- the clearing principles, in accordance with its *A Guide to the Assessment of Applications to Clear Native Vegetation under Part V of the Environmental Protection Act 1986* (December 2014)
- advice received from the Department of Biodiversity, Conservation and Attractions (DBCA)<sup>3</sup>
- the permit holder's *Vegetation Survey Baandee North Rd*<sup>4</sup> (vegetation survey), *Follow up notes for Department of Biodiversity, Conservation and Attractions*<sup>5</sup> (follow-up notes), and *Population survey: Aluta aspersa var. localis Priority 2 species*<sup>6</sup>, which it considered were conducted in accordance with the Environmental Protection Authority *Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment*<sup>7, 8</sup>.

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<sup>2</sup> Shire of Kellerberrin (2019) *Revegetation Plan for Lot 306 on Deposited Plan 409422*. Unpublished report.

<sup>3</sup> Department of Biodiversity, Conservation and Attractions (2019) *Advice received in relation to clearing application CPS 8253/1 regarding Priority 3 'Eucalypt woodlands of the Western Australian Wheatbelt' priority ecological community (being a component of the Commonwealth-listed 'Eucalypt Woodlands of the Western Australian Wheatbelt' threatened ecological community) and Priority 2 flora Aluta aspera subsp. localis*.

<sup>4</sup> Santaleuca Consulting (2018) *Vegetation Survey Baandee North Rd*. Report prepared for the Shire of Kellerberrin, dated 24 October 2018.

<sup>5</sup> Santaleuca Consulting (2019) *Vegetation Survey Baandee North Rd. Follow up notes for Department of Biodiversity, Conservation and Attractions*. Report prepared for the Shire of Kellerberrin, dated 20 February 2019.

<sup>6</sup> Santaleuca Consulting (2019) *Population survey: Aluta aspersa var. localis Priority 2 species – 1471 Baandee North Road*. Report prepared for the Shire of Kellerberrin, dated 9-11 July 2019.

<sup>7</sup> Environmental Protection Authority (2016) *Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment*. Technical Guidance, December 2016. Government of Western Australia.

<sup>8</sup> DWER response to Appeal 004/20, 3 March 2020, pages 1 and 6.

## OVERVIEW OF APPEAL PROCESS

In accordance with the *Environmental Protection Act 1986* (EP Act), two reports relating to the matters raised on appeal are required for the Minister for Environment to determine the outcome of an appeal:

- a report from the Appeals Convenor, as required by section 109(3) of the EP Act
- a report from the decision-making authority of the decision under appeal, as required by section 106(1).

This document is the Appeals Convenor's report to the Minister.

In order to properly advise the Minister, the Appeals Convenor conducted an investigation into the matters raised on appeal. The investigation included:

- review of and regard for the matters raised in the appeal submitted by the appellant
- review of and regard for the response to the appeal provided by the permit holder
- review of and regard for the report from DWER provided under section 106 of the EP Act
- video conferences with the permit holder on 20 March 2020, and the appellant on 27 March 2020
- provision of a copy of DWER's s106 report to the appellant, and review of and regard for the appellant's response to this
- review of other information, policy and guidance as considered necessary.

The environmental appeals process is a merits-based process. For appeals in relation to the conditions of a clearing permit, the Appeals Convenor normally considers whether the conditions are adequate or appropriate, taking into account an assessment of the proposed clearing against the principles set out in Schedule 5 the EP Act, as well as other environmental factors. Questions of additional information not considered by DWER, technical errors, errors in DWER's assessment and attainment of relevant policy objectives are normally central to appeals.

## OUTCOME SOUGHT BY APPELLANTS

The appellant is seeking for the Minister to provide clarity as to the adequacy of the offset conditions applied to the clearing permit and submitted that the offset should be increased.

## GROUND OF APPEAL: ADEQUACY OF THE OFFSET CONDITIONS

The appellant submitted that the offset required for the proposed clearing is inadequate in area, and the revegetation component is also inadequate in the required species richness, to properly offset the Commonwealth-listed 'Eucalypt Woodlands of the Western Australian Wheatbelt' threatened ecological community (Wheatbelt Woodlands TEC). The appellant also submitted that DWER has not identified the portions of the broader offset sites attributable to the proposed clearing.

In relation to the offset requirements generally, the appellant submitted that:

[The] Decision Report [states] that 5.65ha of the Crown Reserve 33419 along with 3.04ha of revegetation will adequately offset 1.17ha of [Wheatbelt Woodlands] TEC and 1.67ha of significant remnant vegetation. After using the Commonwealth *Offsets Assessment Guide*<sup>9</sup>, we strongly question how DWER has arrived at those numbers, as we fail to calculate similar numbers. ...

Additionally, DWER have not specified which 5.65ha of Crown Reserve 33419 is to be used for the offset. This is important when calculating the proportional benefit derived from it for each offset component ([Wheatbelt Woodlands] TEC and significant remnant vegetation).

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<sup>9</sup> Available at: <http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy>

In relation to the revegetation component, the appellant submitted that:

... a Reconnaissance Survey [is] highly unlikely to detect all species present, and the timing of the survey would seem to result in the inability to detect many annual/geophytic species. [DWER's statement] that the total site species richness was 28 species appears to be a substantial underestimation ... Even though the general area has been poorly sampled (it has relatively few Herbarium records), our search of the vicinity using NatureMap revealed 84 native plant taxa.

... a greater species richness (possibly 84 or, even, substantially more) should be used as the benchmark for revegetation of the cleared area offered as an offset. Specifically, the species composition of the adjoining vegetation (of which there is a substantial amount) should be used as the baseline for revegetation, as well as ensuring that the rehabilitated community contains an adequate component of [Wheatbelt Woodlands TEC] indicator species.

If the area to be revegetated achieved the completion criterion of at least 60% of the species richness of 28 species, it would have only 17 native species (5 tree and 12 shrub species), which is likely at most one fifth of the richness that such a sizeable patch (over 3 ha) would have. As such, the rehabilitated community would effectively be equivalent to a degraded woodland ...

... rehabilitation should not only be adequate in area but should also attempt to replicate the community that had been lost. The conditions imposed by DWER will not achieve that ...

## Consideration

Sections 51H(1) and 51I(2)(b) of the EP Act provide for the offsetting of cleared vegetation, and the WA Environmental Offsets Policy and Guidelines<sup>10</sup> set out the framework for environmental offsets.

The decision report describes the significant residual impacts of the proposed clearing as:

- 1.17 ha of native vegetation in predominantly 'good to very good' condition<sup>11</sup> which is representative of the Wheatbelt Woodlands TEC (and comprises a significant remnant within an extensively cleared landscape)
- a further 1.67 ha of native vegetation in predominantly 'good to very good' condition which comprises a significant remnant within an extensively cleared landscape.

To counterbalance these impacts, DWER applied conditions 9, 10 and 11 on the clearing permit requiring the permit holder to do the following:

- by 2 February 2021, provide DWER with evidence of the executed changes in purpose of:
  - Crown Reserve 33419 from 'Gravel' to 'Conservation' (condition 9)
  - Lot 306 on Deposited Plan 409422 (freehold) to 'Conservation' (condition 10)
- within 12 months of the commencement of clearing and no later than 2 February 2021, implement and adhere to the commitments in the revegetation plan (condition 11).

From available information it is noted that:

- Crown Reserve 33419 (Reserve) is 41.067 ha in area and vested with the permit holder for the purpose of 'Gravel'; available aerial imagery indicates the presence of an active gravel pit of about 2.5 ha in size plus a number of tracks
- Lot 306 comprised of two areas totalling 23.0536 ha and is owned by the permit holder in freehold; available aerial imagery indicates the majority of the land was cleared for agricultural use, with about 3.5 ha of remnant vegetation in the north-east corner.

The decision report states that the balance of both sites can be banked for future clearing offsets.

<sup>10</sup> Government of Western Australia (2011) *WA Environmental Offsets Policy* and (2014) *WA Environmental Offsets Guidelines*. Available at: <http://www.epa.wa.gov.au/policies-guidance/wa-environmental-offsets-policy-2011-and-guidelines>

<sup>11</sup> Vegetation condition scale described in: Keighery, B.J. 1994, *Bushland plant survey – A guide to plant community survey for the community*. Wildflower Society of WA (Inc.), Nedlands, Western Australia.

In response to the appeal, DWER advised that in determining the adequacy of the proposed offset, it considered information provided by the permit holder as well as:

- the presence of [Wheatbelt] Woodlands TEC within Crown Reserve 33419;
- the Excellent to Degraded condition (Keighery, 1994) of the Application Area;
- the Excellent to Pristine condition (Keighery, 1994) of the vegetation within the proposed offset area in Crown Reserve 33419;
- the Completely Degraded condition (Keighery, 1994) of the proposed revegetation area within Lot 306 on Deposited Plan 409422;
- the commitment to revegetate an area to Good condition (Keighery, 1994) or better that is representative of the [Wheatbelt] Woodlands TEC;
- the delay and risk of establishing vegetation to Good condition (Keighery, 1994) through the revegetation;
- the historical zoning of the proposed offset areas (i.e. gravel);
- the long term and immediate conservation of the proposed offset areas; and
- confidence in long term security given that it will be zoned for conservation.<sup>12</sup>

DWER advised that it undertook three calculations in determining the offset required:

- Offset Calculator 1: ... conserving 5.75 ha of vegetation representative of the [Wheatbelt] Woodlands TEC in Excellent to Pristine condition (Keighery, 1994) located within Crown Reserve 33419 offsets the residual impacts of clearing 1.17 ha of the [Wheatbelt] Woodlands TEC by 68.5 per cent (%).
- Offset Calculator 2: ... revegetating 3.03 ha from Completely Degraded condition (Keighery, 1994) to Good condition (Keighery, 1994) or better will offset the residual impacts of clearing 1.17 ha of the [Wheatbelt] Woodlands TEC by 31.5%. Combining the two offsets will offset the residual impacts of clearing 1.17 ha of the [Wheatbelt] Woodlands TEC by 100%.
- Offset Calculator 3: ... conserving an additional 5.65 ha of native vegetation in Excellent condition (Keighery 1994) within Crown Reserve 33419 will offset the residual impacts of clearing vegetation that is considered a significant remnant within an extensively cleared landscape by 100% ...<sup>13</sup>

DWER considered that the significant residual impacts of the proposed clearing can be offset through changing the purpose of 11.4 ha of the Reserve to 'Conservation' (land acquisition component), and revegetating 3.04 ha of Lot 306 to 'good' condition (revegetation component).

#### Land acquisition component

As set out above, DWER considered that changing the purpose of a total of 11.4 ha of the Reserve to 'Conservation' will counterbalance significant residual impacts to the Wheatbelt Woodlands TEC in part, and the significant remnant in full.

The permit holder's *Vegetation Condition Report – Kellerberrin Shire Reserve R33419*<sup>14</sup> (vegetation condition report) identifies the vegetation within the Reserve as including:

- 5.75 ha of gimlet (*Eucalyptus salubris*) woodland consistent with the Wheatbelt Woodlands TEC, of which 5.4 ha (94 per cent) is in 'pristine' condition<sup>15</sup> and 0.35 ha is in 'good to very good' condition
- 4.8 ha of mallee/jam woodland in 'pristine' condition, and a further 13.3 ha of mixed sheoak woodland with sandplain heath in 'excellent to pristine' condition (refer Figure 2).

<sup>12</sup> DWER response to Appeal 004/20, 3 March 2020, page 3.

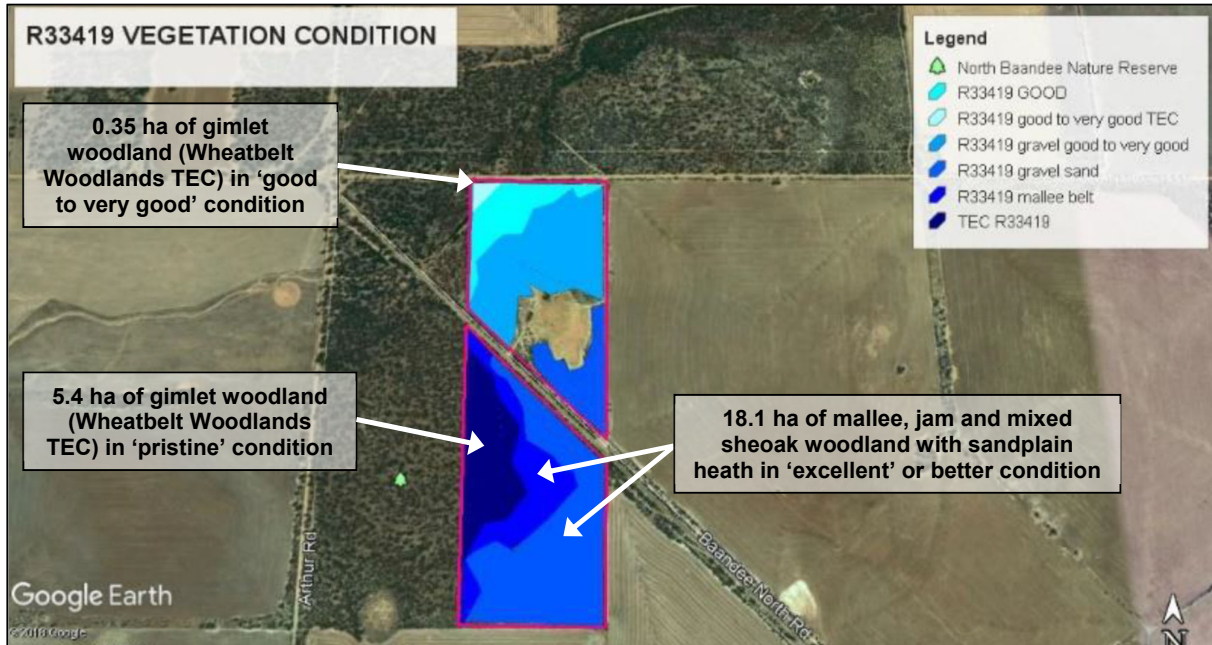
<sup>13</sup> DWER response to Appeal 004/20, 3 March 2020, pages 3-4.

<sup>14</sup> Santaleuca Consulting (2019) *Vegetation Condition Report – Kellerberrin Shire Reserve R33419 – RE: CPS 8253/1*. Report prepared for the Shire of Kellerberrin, dated 9 October 2019. Published 13 February 2020 at: <ftp://ftp.dwer.wa.gov.au/permit/8253/>

<sup>15</sup> The vegetation condition report states that this vegetation condition scoring is based on Keighery (1994).



**Figure 2: Mapped vegetation condition in Crown Reserve 33419**

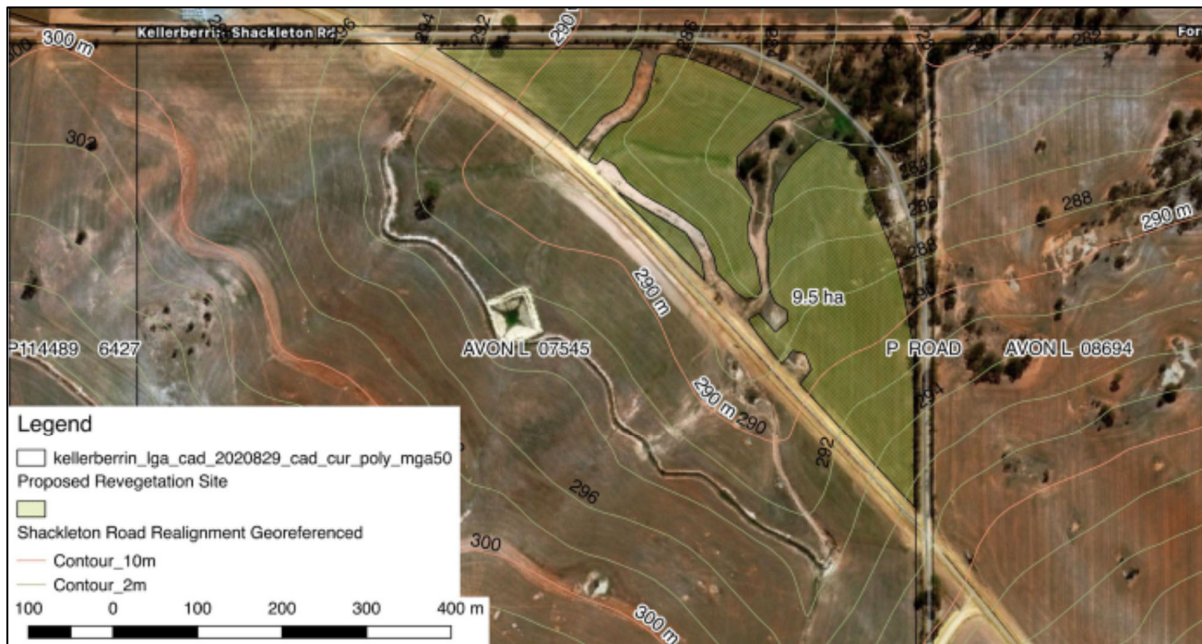


(Source: Santaleuca Consulting (2019) Vegetation Condition Report, page 2)

### Revegetation component

As set out above, DWER considered that revegetating 3.04 ha of Lot 304 will counterbalance significant residual impacts to the Wheatbelt Woodlands TEC in part. The revegetation plan indicates that about 9.5 ha of Lot 306 is proposed to be revegetated between the new and old alignments of the Shackleton-Kellerberrin Road (refer Figure 3).

**Figure 3: Proposed revegetation site on Lot 306**



(Source: Shire of Kellerberrin (2019) Revegetation Plan, page 3)

It is understood that the actions set out in condition 11 of the clearing permit reflect revegetation commitments and completion criteria set out in the revegetation plan.



### *Species richness*

In relation to the appellant's concerns about the species richness specified in condition 11, it is understood this was determined from the findings of the permit holder's *Reference Site Survey – Revegetation Project on the Shackleton-Kellerberrin Rd Kellerberrin*<sup>16</sup> (reference site survey), which:

- considered two reference sites with vegetation in 'pristine' condition within Crown Reserve A10719 located about two kilometres (km) south of the revegetation site, and a third reference site with vegetation in 'very good to excellent' condition within the north-eastern corner of Lot 306
- identified a total of 28 species within the three reference sites
- identified that the revegetation site will support gimlet, salmon gum (*Eucalyptus salmonophloia*) and York gum (*Eucalyptus loxophleba* subsp. *loxophleba*), being dominant canopy species of the Wheatbelt Woodlands TEC as identified in the Approved Conservation Advice<sup>17</sup> for the TEC.

DWER advised that the revegetation plan and reference site survey were prepared in accordance with its *A guide to preparing Revegetation Plan for Clearing Permits*<sup>18</sup> (Revegetation Guide).<sup>19</sup>

In relation to the appellant's NatureMap search and species richness, DWER considered that the reference site survey was undertaken in accordance with its Revegetation Guide, and advised that:

[It] recognises that the Appellant obtained a much higher species diversity utilising NatureMap than identified during the surveys. NatureMap identifies the total number of species within a defined area (i.e. 10 kilometres), and includes species found across a variety of habitat types. The survey results focused on those areas that are representative of the [Wheatbelt] Woodlands TEC, whereas the NatureMap search is likely to have included other areas such as shrublands and clay pans, increasing the number of species recorded. As the Appellant has not included the search terms used in NatureMap, [it] is not able to provide further accurate comment on reasons for the differences in findings. ...

[It] notes that the completion criteria outlined in the revegetation plan and incorporated into the Permit may not reflect the vegetation condition and composition of a vegetation representative of the [Wheatbelt] Woodlands TEC in Excellent condition (Keighery, 1994). [It] recognises the low success rates of revegetating an area to Excellent condition (Keighery, 1994). It has conditioned completion criteria that is more representative of vegetation in Good condition (Keighery, 1994) which is in accordance with [its] Revegetation Guide in that revegetation should be consistent with SMART principles (specific, measurable, achievable, relevant, time-bound).

The completion criteria proposing to revegetate vegetation to Good condition (Keighery, 1994) has been taken into consideration when determining an adequately sized offset. ... the 'future quality of offset' for the revegetation calculation was given a value of five to represent vegetation in Good condition (Keighery, 1994). If the completion criteria and associated condition on the Permit required revegetation to Excellent condition (Keighery 1994), a value of eight would have been used ..., reducing the size of the offset and revegetation required.<sup>20</sup>

Noting that DWER is satisfied that the reference site survey was undertaken in line with its Revegetation Guide, and that the revegetation requirements set out in the revegetation plan and the clearing permit are based on the findings of the reference site survey, it is considered that the species richness stated for the proposed revegetation is reasonable.

<sup>16</sup> Santaleuca Consulting (2019) *Reference Site Survey – Revegetation Project on the Shackleton-Kellerberrin Rd Kellerberrin – RE: CPS 8253/1*. Report prepared for the Shire of Kellerberrin, dated 5 November 2019. Published 13 February 2020 at: <ftp://ftp.dwer.wa.gov.au/permit/8253/>

<sup>17</sup> Department of the Environment (2015) *Approved Conservation Advice (including listing advice) for the Eucalypt Woodlands of the Western Australian Wheatbelt*. Canberra: Department of the Environment. Available at: <http://www.environment.gov.au/cgi-bin/sprat/public/publicshowcommunity.pl?id=128&status=Critically+Endangered>

<sup>18</sup> Department of Water and Environmental Regulation (2018) *A Guide to Preparing Revegetation Plans for Clearing Permits under Part V of the Environmental Protection Act 1986*. Government of Western Australia. Available at: <https://www.der.wa.gov.au/our-work/clearing-permits/>

<sup>19</sup> DWER response to Appeal 004/20, 3 March 2020, page 3.

<sup>20</sup> DWER response to Appeal 004/20, 3 March 2020, pages 6-7.

Further, noting that DWER's published offset calculation<sup>21</sup> indicates that DWER has 60 per cent confidence in the permit holder's ability to achieve 'good' condition, it is considered the completion criteria set out in the clearing permit reflect a reasonable and achievable outcome.

Although not raised on appeal, it is noted that condition 11 refers to *Revegetation Plan for Lot 306 on Deposited Plan 490422* (emphasis added). DWER may wish to consider correcting this reference to '409422' consistent with the document title.

### Reasonableness of the scores

The appellant challenged the scores applied by DWER in its use of the Commonwealth *Offsets Assessment Guide* to determine the minimum required offset.

Given this, it is necessary to examine the reasonableness of the scores applied by DWER and the appellant. In the absence of published State guidance on this matter, the Commonwealth *How to use the offsets assessment guide*<sup>22</sup> was consulted, the details of which are provided at Appendix 1.

From this review of the calculations, it is considered that most of the scores applied by DWER can be justified within the context of the Commonwealth guidance, however it is considered that the following require further review:

- the 'quality' scores applied in the calculations for the land acquisition component
- the 'quality' and 'risk of loss' scores applied in the calculation for the revegetation component.

### Quality scores

The Commonwealth guidance states the following in relation to determining 'quality' scores:

The quality score for *area of habitat* or *area of community* is a measure of how well a particular site supports a particular threatened species or ecological community and contributes to its ongoing viability. There are three components that contribute to the calculation of habitat quality: site condition, site context, and species stocking rates.

The quality score that is input into the impact calculator should be the quality at the time of assessment. In the offset calculator, *start quality* should be the quality of the offset site at the time of assessment. The two future values of quality in the offset calculator - *future quality without offset* and *future quality with offset* - should be estimated at the time at which the ecological benefit of the offset is expected to be realised (this time is input at *time until ecological benefit*). *Future quality without offset* is the estimate of the habitat quality at this future time based on a business as usual scenario – that is, considering current management practices, use of the site and historic trends for the quality of habitat on the site. *Future quality with offset* should be the estimated habitat quality at the same future time incorporating the proposed offset activities.

It is important to note that the assessment of quality for threatened species habitat and ecological communities is not simply a scoring of vegetation 'pristineness'. Rather, there are three components that contribute to the calculation of habitat quality:

- *Site condition*: This is the condition of a site in relation to the ecological requirements of a threatened species or ecological community. This includes considerations such as vegetation condition and structure, the diversity of habitat species present, and the number of relevant habitat features.
- *Site context*: This is the relative importance of a site in terms of its position in the landscape, taking into account the connectivity needs of a threatened species or ecological community. This includes considerations such as movement patterns of the species, the proximity of the site in relation to other areas of suitable habitat, and the role of the site in relation to the overall population or extent of a species or community.

<sup>21</sup> Published 13 February 2020 at: <ftp://ftp.dwer.wa.gov.au/permit/8253/>

<sup>22</sup> Department of Sustainability, Environment, Water, Population and Communities (2012) *How to use the offsets assessment guide*. Government of Australia. Available at: <http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy>

- *Species stocking rate*: This is the usage and/or density of a species at a particular site. The principle acknowledges that a particular site may have a high value for a particular threatened species, despite appearing to have poor condition and/or context. It includes considerations such as survey data for a site in regards to a particular species population or, in the case of a threatened ecological community this may be a number of different populations. It also includes consideration of the role of the site population in regards to the overall species population viability or community extent ...

These components contribute to the final habitat quality score ... however the weighting given to each component is dependent on the ecological requirements of the impacted species or ecological community. For example, for some species the most important consideration is the location of a site in the landscape, whereas for others the presence of important habitat features on the site itself may be the most important influencing factor

In all cases, habitat quality needs to be assessed consistently on both the impact and offset calculators of the guide.

When determining the suitability of a proposed offset using the guide, the minimum requirement is that the quality score of the offset site (*future value with offset*) must at least reach the same value as the quality score of the impact site. For example, an impact on an area of habitat with a quality of 6 must deliver an offset with a minimum equivalent *future quality with offset* score. This may include improving an offset site from a lower score, such as a 3, to a 6 over a specified time period through the proposed management actions.<sup>23</sup>

In relation to the land acquisition component, DWER applied a score of '7' for the 'future quality without offset' and a score of '8' for the 'future quality with offset' (as relevant to both the Wheatbelt Woodlands TEC and the significant remnant). Noting the Commonwealth guidance, this implies that the quality of the site will decrease in the absence of the change in purpose, however will be maintained at its current quality in the event that the change in purpose occurs.

It is noted that the land acquisition component does not include a requirement to undertake any on-ground management to ensure that habitat quality is maintained in the long-term. On this basis, it is considered that it was unreasonable of DWER to apply a lower score for the 'future quality without offset' given that the nature of the land acquisition is administrative, and it is recommended that a score of '8' be applied consistent with the score applied for the 'future quality with offset' in the land acquisition calculation.

In relation to the revegetation component, DWER applied a score of '1' for both the 'start quality' and the 'future quality without offset' (as relevant to the Wheatbelt Woodlands TEC). Noting the Commonwealth guidance, this implies that the site currently has some existing value for the Wheatbelt Woodlands TEC.

The revegetation plan identifies the revegetation site as including 'some native species, particularly *Acacia acuminata* and *Maireana brevifolia*, starting to re-establish'.

The Approved Conservation Advice notes jam (*Acacia acuminata*) and small-leaf bluebush (*Maireana brevifolia*) as key tree and chenopod species (respectively) of the Wheatbelt Woodlands TEC,<sup>24</sup> however indicates that a dominance of jam (in this case, in the absence of key *Eucalyptus* species) is a contra-indicator of the TEC.<sup>25</sup>

On this basis, it is considered that the revegetation site has negligible (if any) existing value for the Wheatbelt Woodlands TEC and is unlikely to achieve value in the absence of revegetation, and it is recommended that a score of '0' be applied for both the 'start quality' and the 'future quality without offset' in the revegetation calculation.

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<sup>23</sup> Commonwealth *How to use the offsets assessment guide*, pages 4-5.

<sup>24</sup> As indicated in the Approved Conservation Advice, Appendix 1, Table A1.

<sup>25</sup> As indicated in the Approved Conservation Advice, page 20.

### *Risk of loss scores*

The Commonwealth guidance includes the following in relation to 'risk of loss' scores:

The *risk of loss* is a percentage figure that describes the chance that the habitat on the proposed offset site will be completely lost (i.e. no longer hold any value for the protected matter) over the foreseeable future (either the life of the offset or 20 years, whichever is shorter).

An estimated risk of loss is entered in the guide for both the business as usual (i.e. without offset) and with offset scenarios. The difference between these figures is the level of averted loss provided by the proposed offset. Where a proponent is seeking recognition for an offset by averting some risk of loss on a proposed offset site, the onus is on the proponent to provide credible proof of the risks that are being mitigated.

There are a number of factors that could influence the *risk of loss* of a site, including:

- presence and strength of formal protection mechanisms currently in place on the proposed site (e.g. zoning, restrictive covenants or state vegetation clearing laws);
- presence of pending development applications, mining leases or other activities on the proposed offset site that indicate development intent and likelihood; and
- average risk of loss for similar sites.

Degradation to the quality of a site due to current management practises and use should not be incorporated into the *risk of loss*, as these factors should be incorporated in the quality score (see section C).

To calculate *risk of loss*, first gather all available information about factors that could influence the level of risk to a proposed offset site, including the factors listed above. These factors should then be sorted into those which increase the *risk of loss*, and those that reduce the *risk of loss*. Consider the likelihood of occurrence of each factor. Finally, balance the factors in each group and determine the residual *risk of loss*.

A consistent approach must be adopted for calculating the *risk of loss* for both the business as usual (i.e. without offset) and with offset future scenarios.<sup>26</sup>

In relation to the revegetation component, DWER applied a score of '90' for the 'risk of loss without offset' and a score of '30' for the 'risk of loss with offset' (as relevant to the Wheatbelt Woodlands TEC). Noting the Commonwealth guidance, this implies that there is a 90 per cent chance that the current value of the revegetation site for the Wheatbelt Woodlands TEC is likely to be lost in the absence of revegetation, and that through establishment of revegetation this risk is reduced to 30 per cent.

It is noted that DWER's rationale for these scores appears to be based around the change in vegetation condition as a result of successful revegetation establishment. In line with the Commonwealth guidance, the change in quality as a result of revegetation should not be a factor in the determination of risk of loss. In addition, during a meeting the permit holder advised that the identified portions of Lot 306 are intended to be revegetated and that there are no plans to develop Lot 306 for other purposes. This suggests that there is a negligible (if any) risk that the site (in respect of its value for the Wheatbelt Woodlands TEC) would be 'lost' in the absence of revegetation.

It is also considered that once revegetation is established to 'good' condition and given the purpose of 'Conservation' as required by the clearing permit, the 'risk of loss with offset' score is likely to be consistent with that applied in DWER's calculation for the land acquisition component.

On this basis, it is recommended that a score of '0' is applied for 'risk of loss without offset' and a score of '10' is applied for 'risk of loss with offset' in the revegetation calculation.

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<sup>26</sup> Commonwealth *How to use the offsets assessment guide*, pages 6-7.

### Revised calculation

Reflecting the above outcome, it is recommended that the offset requirement in the clearing permit is changed in line with the revised offset calculation in Table 1.

**Table 1: Outcomes of revised offset calculation**

Element	DWER calculation <sup>27</sup>		Revised calculation	
	Score	Outcome	Score	Outcome
Land acquisition component				
Future quality without offset	7	Conserving 5.75 ha of gimlet woodland in Crown Reserve 33419 accounts for 68.52 per cent of the offset for the Wheatbelt Woodlands TEC	8	Conserving 5.75 ha of gimlet woodland in Crown Reserve 33419 accounts for <b>27.12</b> per cent of the offset for the Wheatbelt Woodlands TEC
		Conserving 5.65 ha of vegetation in 'excellent' or better condition in Crown Reserve 33419 accounts for minimum 100 per cent of the offset for the significant remnant		Conserving <b>8.12</b> ha of vegetation in 'excellent' or better condition in Crown Reserve 33419 accounts for minimum 100 per cent of the offset for the significant remnant
Revegetation component				
Start quality	1	Revegetating 3.04 ha accounts for 31.48 per cent of the offset for the Wheatbelt Woodlands TEC, which in combination with land acquisition component achieves minimum 100 per cent of the offset	0	Revegetating <b>4.165</b> ha accounts for <b>72.88</b> per cent of the offset for the Wheatbelt Woodlands TEC, which in combination with land acquisition component achieves minimum 100 per cent of the offset
Future quality without offset	1		0	
Risk of loss without offset	90		0	
Risk of loss with offset	30		10	

The permit holder was given the opportunity to review the revised offset calculation (including the rationale for the altered 'quality' and 'risk of loss' scores). Following further discussion with the Office of the Appeals Convenor, the permit holder was satisfied that the revised calculation was reasonable.

### Location of offset sites

Condition 11 on the clearing permit specifies the area of revegetation required on Lot 306, however it is noted that conditions 9 and 10 do not specify the area of Crown Reserve 33419 that is attributed to the proposed clearing. Further, Plans 8253/1i and 8253/1j attached to the clearing permit do not identify the location or extent of the offset sites within either of the land parcels.

In relation to this matter, DWER advised that:

The precise location of the offset area was not identified within the permit or plan. [It] notes that the entirety of Crown Reserve 33419 and Lot 306 is proposed to have its reservation changed to the purpose of "Conservation" and these areas have been hatched red on Plans 8253/1 (i) and (j). [It] understands that the remaining native vegetation within the reserve will be 'banked' by the Permit Holder to be used to satisfy future offset requirements. The exact areas of the reserves that are to be used for the purpose of this application will be digitised within [the WA Environmental] Offsets Register<sup>28, 29</sup>

<sup>27</sup> As stated in DWER's published offset calculation *Offset Calculator: Land Acquisition – TEC* and *Offset Calculator: Land Acquisition – Significant Remnant* and *Offset Calculator: Revegetation – TEC*.

<sup>28</sup> Available at: <https://offsetsregister.wa.gov.au/public/home/>

<sup>29</sup> DWER response to Appeal 004/20, 3 March 2020, page 5.



From the above, it is understood that:

- all of the 5.75 ha of gimlet woodland indicated in Figure 2 is attributed to a portion of the Wheatbelt Woodlands TEC offset
- a portion of the 18.1 ha of mallee, jam and mixed sheoak woodland with sandplain heath in 'excellent' or better condition indicated in Figure 2 is attributed to the significant remnant offset
- a portion of the 9.5 ha revegetation site indicated in Figure 3 is attributed to a portion of the Wheatbelt Woodlands TEC offset.

With regard for the outcome of the revised calculation and noting that the offset refers to specific extents within broader areas, it is considered that conditions 9 and 11 should be amended to state that 13.87 ha of Crown Reserve 33419 and 4.165 ha of the revegetation on Lot 306 are attributed to the proposed clearing.

## CONCLUSION AND RECOMMENDATION

For the reasons stated in this report, I consider that DWER's decision to grant the clearing permit subject to conditions, including offsets to counterbalance the significant residual impacts of the proposed clearing, was supported by the available information. However I am of the view that DWER's assessment of the suitability of the offset requires review and the conditions relating to offsets require strengthening. I therefore recommend that the appeal is allowed to the extent that:

- condition 9 of the clearing permit is amended to state that 13.87 ha of Crown Reserve 33419 is attributed to the proposed clearing, which is to include:
  - 5.75 ha of native vegetation consistent with the Wheatbelt Woodlands TEC in 'good to very good' or better condition
  - 8.12 ha of other native vegetation in 'excellent' or better condition
- condition 11 of the clearing permit is amended to state that the permit holder must revegetate and rehabilitate 4.165 ha on Lot 306 on Deposited Plan 409422.

The final wording of the conditions is a matter for DWER under section 110 of the EP Act, should the Minister determine to amend the conditions in this way.

Although not raised on appeal, it is noted that condition 11 refers to *Revegetation Plan for Lot 306 on Deposited Plan 490422* (emphasis added). DWER may wish to consider correcting this reference to '409422' consistent with the document title.

It is also suggested that DWER consider making its offset calculations publicly available for all clearing permits granted with offset requirements, and consider publishing guidance on determining scores for use in the offset calculator, in order to improve transparency around the process.

Emma Gaunt  
APPEALS CONVENOR

**Investigating Officer:**  
Emma Bramwell, Senior Environmental Officer

## APPENDIX 1: SCORES APPLIED IN THE OFFSETS CALCULATION

The decision report describes the significant residual impacts of the proposed clearing as 1.17 ha of native vegetation which is representative of the Wheatbelt Woodlands TEC and a significant remnant within an extensively cleared landscape, plus a further 1.67 ha of native vegetation which is a significant remnant within an extensively cleared landscape, the majority of which is in 'good to very good' condition<sup>30</sup>.

To counterbalance these impacts, DWER applied conditions 9, 10 and 11 on the clearing permit requiring the permit holder to:

- by 2 February 2021, provide DWER with evidence of the executed changes in purpose of:
  - Crown Reserve 33419 from 'Gravel' to 'Conservation' (condition 9)
  - Lot 306 on Deposited Plan 409422 (freehold) to 'Conservation' (condition 10)
- within 12 months of the commencement of clearing and no later than 2 February 2021, implement and adhere to the commitments in the revegetation plan (condition 11).

### Determination of offsets

The clearing permit and decision report indicate that the following offsets package is required to counterbalance the significant residual impacts:

- acquisition of 5.75 ha of vegetation in 'excellent to pristine' condition that is consistent with the Wheatbelt Woodlands TEC, in order to counterbalance a portion of the significant residual impact to the Wheatbelt Woodlands TEC
- acquisition of 5.65 ha of vegetation in 'excellent' condition that is a significant remnant, in order to counterbalance the whole of the significant residual impact to the significant remnant
- revegetation of 3.04 ha to 'good' condition that uses species consistent with the Wheatbelt Woodlands TEC, in order to counterbalance a portion of the significant residual impact to the Wheatbelt Woodlands TEC.

DWER's calculation for the land acquisition and revegetation components of the offset required to counterbalance significant residual impacts to the Wheatbelt Woodlands TEC was based on the scores set out in Table A1. The appellant's alternative scores are also provided.

It should be noted that the appellant did not provide alternative scores for the land acquisition component for the significant remnant, and that at the time of lodging the appeal the appellant had not reviewed DWER's published offset calculations:

These calculations are, however, only offset the loss of the Eucalypt Woodland TEC and not the significant remnant vegetation component, so we are unable to replicate, nor determine how DWER ... can specify that only 5.65ha of Crown Reserve 33419 is required.

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<sup>30</sup> Vegetation condition scale described in: Keighery, B.J. 1994, *Bushland plant survey – A guide to plant community survey for the community*. Wildflower Society of WA (Inc.), Nedlands, Western Australia.

**Table A1: Scores applied in the calculation of offsets for the Wheatbelt Woodlands TEC**

Element	Commonwealth guidance <sup>31</sup>	Land acquisition component				Revegetation component			
		DWER <sup>32</sup>		Appellant		DWER <sup>33</sup>		Appellant	
		Score	Justification	Score	Justification	Score	Justification	Score	Justification
Start area	The area of habitat/community or number of features/individuals proposed to offset the impacts	5.75	5.75 ha of TEC occur within proposed offset area	2.7	... assumed that half of the [Wheatbelt] Woodland TEC in excellent condition, i.e. 2.7 ha, will be used as an offset	3.04	3.038 hectares of [revegetation] to good or better condition is required	3.04	[Not specified]
<b>Quality-related scores</b>									
Quality (impact site)	The quality score for area of habitat/community being impacted – a measure of how well a particular site supports a particular threatened species or ecological community and contributes to its ongoing viability	7	The vegetation is predominantly in a very good to good condition, comprising <i>Eucalyptus</i> woodlands over variable understorey	[Same as applied by DWER]		[Same as for land acquisition]		[Same as applied by DWER]	
Start quality (offset site)	The quality score for the area of habitat/community proposed as an offset – a measure of how well a particular site supports a particular threatened species or ecological community and contributes to its ongoing viability	8	The TEC occurs in an excellent to pristine ... condition	9	From the Decision Report, 5.4ha of the Eucalypt Woodland TEC within Crown Reserve 33419 is assessed as being of Excellent condition	1	Revegetation of an area that is in a degraded to completely degraded condition	[Same as applied by DWER]	

<sup>31</sup> As stated in the Commonwealth *Offsets Assessment Guide* rationale. Detailed descriptions available in: Department of Sustainability, Environment, Water, Population and Communities (2012) *How to use the offsets assessment guide*. Government of Australia. Available at: <http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy>

<sup>32</sup> As stated in DWER's published offset calculation *Offset Calculator: Land Acquisition – TEC* and *Offset Calculator: Land Acquisition – Significant Remnant*. Published 13 February 2020 at: <ftp://ftp.dwer.wa.gov.au/permit/8253/>

<sup>33</sup> As stated in DWER's published offset calculation *Offset Calculator: Revegetation – TEC*

Future quality without offset (offset site)	The predicted future quality score (habitat/community) or value (features/individuals) of the proposed offset site without the offset	7	It is assumed that the vegetation would decrease in condition as an active gravel reserve	[Same as applied by DWER]		1	It is assumed that the condition of the area would stay the same over a 10 year period given that it is already in a degraded to completely degraded condition	[Same as applied by DWER]	
Future quality with offset (offset site)	The predicted future quality score (habitat/community) or value (features/individuals) of the proposed offset site with the offset	8	It is assumed that the vegetation would be maintained at its current quality should it be protected under a conservation covenant	9	... assuming reasonable time frames, risks and confidence levels	5	It is assumed that the vegetation of the revegetation area would reach a good or better condition within 10 years	6	... to make up the balance of 0.43 adjusted hectares of the total required offset of 0.82 adjusted hectares for the TEC
Time until ecological benefit (offset site)	This describes the estimated time (in years) that it will take for the main benefit of the quality (habitat/community) or value (features/individuals) improvement of the proposed offset to be realised	1	The process for implementing a conservation covenant could be finalised within one year.	0		10	It is assumed that the condition of the area would stay the same over a 10 year period given that it is already in a degraded to completely degraded condition.	8	[Not specified]
Confidence in result (quality) (offset site)	The level of certainty about the successful achievement of the proposed change in quality (habitat/community) or value (features/individuals)	90	There is a relatively high level of confidence that the offset site would decrease in quality slightly without a covenant, but would maintain at its current quality with a covenant.	80		60	Revegetation runs the risk of failing	[Same as applied by DWER]	

Risk-related scores								
Risk related time horizon (offset site)	This describes the timeframe over which changes in the level of risk to the proposed offset site can be considered and quantified	20	The offset site will be conserved in perpetuity under a conservation covenant. 20 years is the maximum value associated with this field.	[Same as applied by DWER]		20	The revegetation site will be conserved in perpetuity under a conservation covenant or change in vesting to conservation. 20 years is the maximum value associated with this field.	[Same as applied by DWER]
Risk of loss without offset (offset site)	This describes the chance that the habitat/community on the proposed offset site will be completely lost (i.e. no longer hold any value for the protected matter of concern) over the foreseeable future without an offset	30	The vegetation in the Wheatbelt Region is subject to continuing clearing and land degradation pressures	25	... assuming reasonable time frames, risks and confidence levels	90	The vegetation in the potential revegetation site which is assumed to be in a degraded to completely degraded condition is considered unlikely to regenerate to a good condition without revegetation efforts	50 [Not specified]
Risk of loss with offset (offset site)	This describes the chance that the habitat/community on the proposed offset site will be completely lost (i.e. no longer hold any value for the protected matter of concern) over the foreseeable future with an offset	10	A conservation covenant should reduce the risk of loss to 10%. The risk of catastrophic events (e.g. fire.) remain	5		30	A conservation covenant or change in vesting to conservation should reduce the risk of loss to 30%. The risk of revegetation failing still remains	5 [Not specified]
Confidence in result (risk) (offset site)	The capacity of measures to mitigate risk of loss of the proposed offset site	90	There is a high level of confidence that the covenant will mitigate the risk of loss.	70		90	A conservation covenant or change in vesting to conservation will protect the offset site	80 [Not specified]