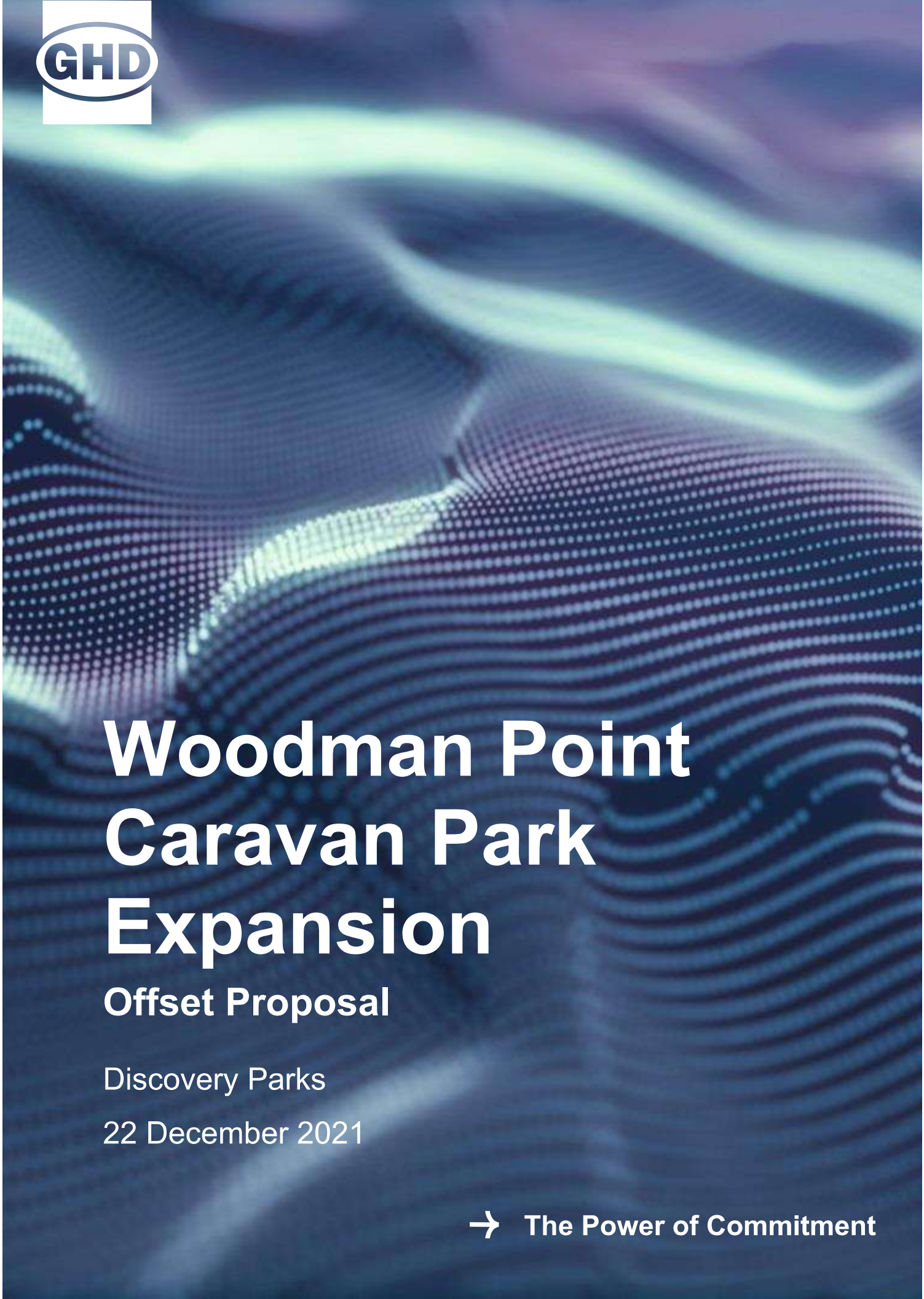


Woodman Point Caravan Park Expansion

Offset Proposal

Discovery Parks

22 December 2021

→ The Power of Commitment

GHD Pty Ltd 008488373
999 Hay St,
Perth, WA 6000, Australia
T 08 6222 8222 | **ghd.com**

Printed date	22/12/2021 9:57:00 AM
Last saved date	22 December 2021 9:57 AM
File name	https://projectsportal.ghd.com/sites/pp13_02/woodmanpointcaravanp/ProjectDocs/12511610_Woodman Point Caravan Park Expansion_Offset Proposal.docx
Author	Rochelle Lupton
Project manager	Callum Little
Client name	Discovery Parks
Project name	Woodman Point Caravan Park Expansion
Document title	Woodman Point Caravan Park Expansion | Offset Proposal
Revision version	Rev 1
Project number	12511610

Document status

Status Code	Revision	Author	Reviewer		Approved for issue		
			Name	Signature	Name	Signature	Date
S3	1	R Lupton	D Ginger	N/A	M Brook		22/12/2021

Contents

Table index

Figure index

Appendices

1. Introduction

Discovery Parks is proposing to expand the Woodman Point Caravan Park (the Project), located off Cockburn Road, Coogee in Western Australia (WA). The proposed expansion will increase the current caravan park area by approximately 3.48 hectares (ha) (the project area). The project will add an additional 115 accommodation sites to the park and additional supporting facilities and structures.

1.1 Project background

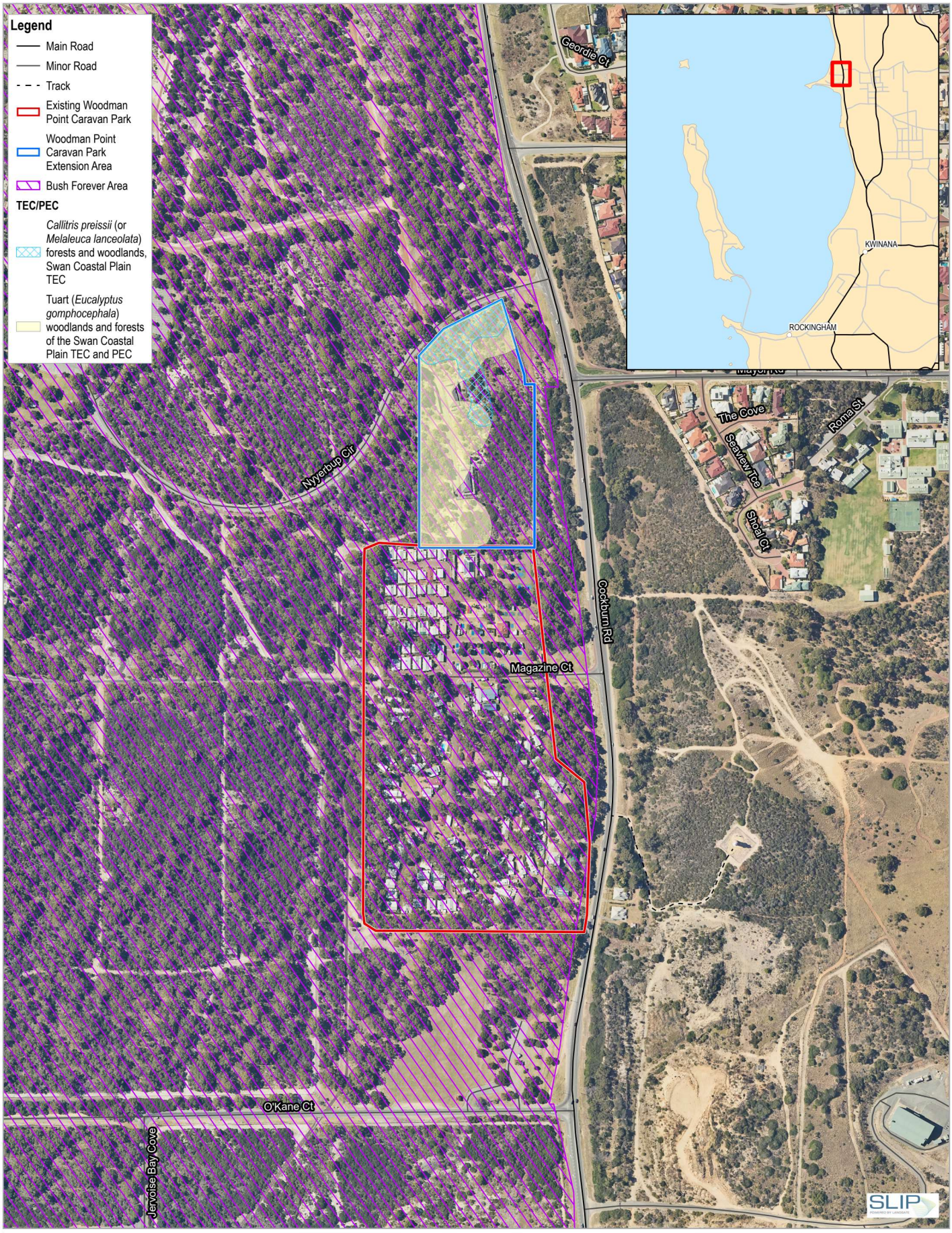
The Project area has a long history both pre and post European settlement. There was a large presence of Aboriginal people in the Woodman Point area prior to European settlement, and the area acted as a quarantine station for incoming travellers during European settlement. The modern history of the area has links to World War II, with three munitions magazines in the vicinity of the Project area. The Woodman Park reserve was established in 1987 (DPAW 2010) and designated as a regional park in 1997. The caravan park has been present in the project area for over 20 years.

Discovery Parks purchased the existing caravan park in 2016, with the intention of expanding the caravan park. The project area is predominantly zoned as Recreation in the Woodman Point Regional Management Plan (WPRMP), within which the management emphasis is to “provide a variety of recreation opportunities while minimising impacts of visitor activities through sensitive placement” (DPAW 2010). By expanding to the north of the existing park, the caravan park can increase to the desired size while remaining within the area zoned for recreation in the WPRMP, while reducing the impact area to land that has not been historically cleared.

This offset proposal is intended to be read in conjunction with the Woodman Point Caravan Park Expansion Environmental Impact Assessment (GHD 2021) and has been prepared to support a clearing permit application.

1.2 Project location

The existing Woodman Point Caravan Park is located at 132 Cockburn Road, Coogee, approximately 9 kilometres (km) south of Fremantle within the City of Cockburn. The Park is accessed from Cockburn Road, which is a main road linking Fremantle, Kwinana and Rockingham. The Project area is located adjacent to, and north of the existing Woodman Point Caravan Park. Both the existing Woodman Point Caravan Park and the project area are located on Crown Reserve R 49220, managed by Department of Biodiversity, Conservation and Attractions (DBCA). The Project area is approximately 3.48 ha and will be leased from DBCA. The project location is shown in Figure 1.



Paper Size ISO A3
at Scale: 1:4,000

0 25 50 75 100

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 50

N

GHD

Discovery Holiday Parks
Woodman Point Offset

Project No. **12511610**
Revision No. **B**
Date **20/12/2021**

Project Location

FIGURE 1

N:\AU\Adelaide\Projects\33\12511610\GIS\Maps\Working\12511610_FigureUpdates\12511610_FigureUpdates.aprx\12511610_001_ProjectLocation_RevB
Print date: 20 Dec 2021 - 11:10

Data source: Survey area - 20200518: GHD; Roads, aerial photography - WANow: Landgate / SLIP. Created by: rbrown3

1.3 Purpose of this report

The Project will be subject to a Negotiated Planning Outcome (NPO) as a result of multiple State agencies having a vested interest in the parcel of land, including DBCA, Department of Planning, Lands and Heritage (DPLH) and Department of Water and Environment Regulation (DWER). The overarching WPRMP (DBCA 2010) designates an area for the expansion of the existing caravan park within the Woodman Point Regional Park and the current project area is predominantly located within this designated area.

The project will require clearing of 1.3 ha of native vegetation, and 1.47 ha of planted/revegetation installed by DBCA for conservation purposes, in DBCA Reserve 49220 and Bush Forever Site No. 341. The proposed clearing is at variance to Clearing Principles a), d) and h) under the *Environmental Protection Act 1986*, specifically –

- a) Native vegetation should not be cleared if it comprises a high level of biological diversity.
- 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.
- 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.

According to the WA Environmental Offsets Guideline (GoWA 2014), an offset is required where the impact is to areas managed for the purpose of conservation, including Bush Forever sites and conservation covenanted land, or where vegetation clearing is at variance to the biological clearing principles. Application of the WA Environmental Offset Policy principles to this Offset Proposal are detailed in Section 4.

An offset proposal will also be required in accordance with State Planning Policy 2.8 *Bushland policy for the Perth Metropolitan Region* Appendix 4 (GoWA 2010). The application of the SPP 2.8 Offset Guidance to this Offset Proposal is detailed in Section 5.

Consultation has also been undertaken with DBCA as the land manager, regarding the offset measures included in this Offset Proposal (Section 6).

The purpose of this report is to demonstrate the measures that will be used to achieve sound offset outcomes and compliance with the requirements of GoWA 2014 and GoWA201.

1.4 Avoidance, minimisation and mitigation

The Project has been designed to minimise residual impacts and maintain ecological linkages by locating the project area within previously disturbed areas. The long history of disturbance in the project area includes clearing, activity associated with munitions magazines, weed invasion, introduced fauna (rabbits and foxes) and edge effects from adjacent land uses (caravan park and roads). Tree and shrub plantings are evident across the survey area and the majority of the vegetation to be cleared is non-native or planted by DBCA. Historical aerial imagery shows a large proportion of the area has been previously cleared within the last 40 years, with revegetation evident over the last 10 to 20 years. The vegetation surveys (GHD 2020a, GHD 2020b) identified that the majority of the project area was assessed to be in Degraded or Completely Degraded condition (2.24 ha, 64.4%). A small portion of the Project area was assessed to be in Good condition (1.24 ha, 35.6%).

A bushfire management zone will be established within the project area, including minimising vegetation to obtain a low bushfire threat level. To avoid excess clearing and retain the amenity of the area for park users, mature trees within the bushfire management zone will be retained where possible, with groundcover and mid-story vegetation removed to manage bushfire risk (parkland cleared). At this current stage of project planning, the exact area of bushfire management zone is unknown, therefore the clearing estimates conservatively assume that the entire site will be either cleared or parkland cleared. Clearing will be restricted to the minimum area required for construction works and will be clearly demarcated on site to prevent accidental clearing.

A Construction Environmental Management Plan (CEMP) will be prepared by the contractor for the Project. The CEMP will include specific management actions, mitigation measures and project responsibilities. The CEMP will include the requirements to:

- Restrict the removal of vegetation to the minimum area required for construction works and bushfire management.
- Clearly demark approved clearing area on site. Clearing is to be checked pre and post clearing.

1.5 Significant residual impacts

The significant residual impacts of the project include clearing of:

- 0.55 ha of *Callitris preissii* (or *Melaleuca lanceolata*) forests and woodlands, Swan Coastal Plain (FCT30a) – listed as Vulnerable under *Biodiversity Conservation Act 2016* – including 0.01 ha of native vegetation and 0.54 ha of vegetation previously planted and revegetated by DBCA. Of the total 0.55 ha, 0.01 ha is in Good condition, 0.54 ha is in Degraded condition.
- 1.59 ha of Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain TEC and PEC – listed as Critically Endangered under the EPBC Act and as Priority 3 by the DBCA – including 0.33 ha of native vegetation and 1.25 ha of previously planted and revegetation by DBCA. Of the total 1.59 ha, 0.27 ha is in Good condition, 1.3 ha is in Degraded condition and 0.02 ha is in Completely Degraded condition.
- 1.23 ha of native vegetation in Good condition within Bush Forever Site 341 and DBCA Reserve 49220. This vegetation is comprised of *Acacia* Closed Shrubland (1.08 ha in Good condition) and *Melaleuca* Shrubland (0.15 ha in Good condition).

2. Offset Proposal Requirements

2.1 Summary of offset proposed

A combination of measures including revegetation works and land purchase is proposed to meet the requirements of the project offset. Discovery Parks is proposing to revegetate 1.34 ha of suitable Degraded land within the existing Woodman Point Regional Park for the purposes of partially offsetting the area to be cleared for the project. Consultation with DBCA has identified 2 locations within Woodman Point Regional Park that are suitable for revegetation. Revegetation at these locations would consist of *Callitris preissii* (or *Melaleuca lanceolata*) forests and woodlands TEC and Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain TEC and PEC as detailed in Figure 2.

In addition, Discovery Parks will provide funding for the purchase of 3.2 ha of vegetated land, consisting of *Callitris preissii* (or *Melaleuca lanceolata*) forests and woodlands TEC and Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain TEC and PEC. This land will be placed in Conservation Covenant, to be managed by DBCA in perpetuity.

The proposed offset is expected to meet the requirements of both the WA Environment Offsets Policy (GoWA 2014) and SPP 2.8 Appendix 4 (GoWA 2010).

A summary of the offset proposed is provided in Table 1 below.

Table 1 Summary of Residual Impacts, Offset Type, Size of Offset and Percentage of Residual Impact Offset

Significant Residual Impact		Revegetation mitigation for temporary clearing applicable? (Y/N)	Offset Type	*Size of offset applicable to residual impact (ha)
1	Clearing of 0.55 ha of *Callitris preissii* (or *Melaleuca lanceolata*) forests and woodlands, Swan Coastal Plain (FCT30a) TEC	N	Revegetation	1.34 ha of *Callitris preissii* (or *Melaleuca lanceolata*) forests and woodlands, Swan Coastal Plain (FCT30a) TEC
			Land purchase	Purchase of 3.2 ha of land, including 0.55 ha of *Callitris preissii* (or *Melaleuca lanceolata*) forests and woodlands, Swan Coastal Plain (FCT30a) TEC
2	Clearing of 1.59 ha of Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain TEC and PEC	N	Revegetation	0.36 ha of Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain TEC and PEC
			Land purchase	Purchase of 3.2 ha of land, including 3.2 ha of Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain TEC and PEC
3	Loss of 1.23 ha of vegetation in Good condition within Bush Forever Site 341 and DBCA Reserve 49220	N	Land purchase	It is assumed that only vegetation in Good of higher condition will require offset for the proposed clearing in a Bush Forever site, given the already disturbed nature of the site. Purchase of 3.2 ha of land to be placed in conservation covenant and managed by DBCA would therefore provide a roughly 3:1 offset. Land is to include vegetation representing Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain PEC, and *Callitris preissii* (or *Melaleuca lanceolata*) Woodlands and Forests of the Swan Coastal Plain TEC

The location of the proposed revegetation sites are included in Figure 2.

Figure 2 *Locations of revegetation*

2.2 Assumptions for the Offset Proposal

2.2.1 Revegetation

Discovery Parks proposes to revegetate a total of 1.34 ha of Degraded to completely cleared vegetation, over 2 sites within Woodman Point Regional Park. A Revegetation Management Plan will be developed in conjunction with DBCA prior to commencement of revegetation efforts, including agreed upon completion criteria between Discovery Parks and DBCA. It is assumed that it will take approximately 3-5 years to achieve the desired species diversity, vegetation cover and weed density. For the purposes of the calculation, it is assumed that full ecological benefit will be achieved at 10 years.

State Planning Policy 2.8 specifies a requirement to plant a specific number of trees for each 'large' and 'medium' sized tree to be removed for the project. In absence of any criteria for large and medium sized trees, it is assumed that this criterion will be adequately met by the proposed revegetation offset, which will include the following:

- 1.34 ha of revegetation of *Callitris preissii* (or *Melaleuca lanceolata*) Woodlands and Forests of the Swan Coastal Plain TEC
- 0.36 ha of revegetation of Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain PEC.

DBCA are an experienced land manager who have undertaken revegetation of both Tuart PEC/TEC and *Callitris preissii* TEC within Woodman Point Regional Park in the past, including the revegetation present in the project area. Communications with DBCA have identified that the revegetation has a high probability of success. Risk of loss with and without offset has been set at 0% for this project for the revegetation calculations, as the areas to be revegetated are within Woodman Point Regional Park and subject to conservation protection.

2.2.2 Land purchase

Land purchase is proposed to facilitate the remainder of the offset for this project. Discovery Parks assume that funds can be provided to the Offset Fund for the purchase of 3.2 ha of land to be placed in conservation covenant. This land would include:

- 0.55 ha of *Callitris preissii* (or *Melaleuca lanceolata*) Woodlands and Forests of the Swan Coastal Plain TEC
- 3.2 ha of Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain PEC

A quality of 7 has been applied to the land purchase calculations on the assumption that offset land would need to be in Good to Very Good condition or higher to meet the conditions for consideration as an offset site.

It is assumed that land would be identified and purchased within 12 months. 20 years offset duration is applied as it is assumed that the offset site will be placed into conservation covenant and managed by DBCA who are experienced land managers.

It is assumed that only vegetation in Good of higher condition will require offset for the proposed clearing in a Bush Forever site, given the already disturbed nature of the site.

3. Offset guide inputs and justification

Offset calculations have been based on the WA Environmental Offsets Calculator (GoWA 2021a). The offset calculations are included in Appendix A for reference.

Table 2 ***Conservation significance inputs - Callitris preissii (or Melaleuca lanceolata) Woodlands and Forests of the Swan Coastal Plain TEC (Vulnerable)***

Conservation significance (Step 1) Inputs	
Description	0.55 ha of clearing of *Callitris preissii* (or *Melaleuca lanceolata*) Woodlands and Forests of the Swan Coastal Plain TEC
Type of environmental value	Ecological community
Conservation significance of environmental value	Threatened ecological community - Vulnerable
Conservation significance score	0.2%

Table 3 ***Residual impact inputs - Callitris preissii (or Melaleuca lanceolata) Woodlands and Forests of the Swan Coastal Plain TEC (Vulnerable)***

Residual impact (Step 2) Inputs	
Description	Revegetation is proposed to be undertaken at two Degraded to completely cleared locations within Woodman Point Reserve to partially offset the clearing of 0.55 ha of *Callitris preissii* (or *Melaleuca lanceolata*) Woodlands and Forests of the Swan Coastal Plain TEC
Significant impact (hectares)	0.55 ha of clearing of *Callitris preissii* (or *Melaleuca lanceolata*) Woodlands and Forests of the Swan Coastal Plain TEC
Quality (scale)	A vegetation condition of 3 has been assigned, taking into account the condition of the vegetation in the project area (0.01 ha in Good condition, 0.54 ha is in Degraded condition). In addition, the majority of the *Callitris preissii* (or *Melaleuca lanceolata*) Woodlands and Forests of the Swan Coastal Plain TEC in the project area is planted by DBCA in the last ~10 years (Pers Comms DBCA, 2021).
Quantum of impact	0.17 ha
Proposed rehabilitation (area in hectares)	1.34 ha of revegetation of *Callitris preissii* (or *Melaleuca lanceolata*) Woodlands and Forests of the Swan Coastal Plain TEC is proposed. For the purposes of the offset calculation, 0.55 ha has been input as this value cannot be higher than the quantum of impact.
Current quality of rehabilitation site	3 - The land to be revegetated is in Degraded or worse condition
Future Quality without rehabilitation	3 - Condition is unlikely to change without the proposed offset.
Future Quality with rehabilitation	7 - A Revegetation Management Plan will be prepared in consultation with DBCA including agreed upon completion criteria. It is assumed that vegetation will be condition 7 or higher upon meeting these completion criteria
Time until ecological benefit (years)	10 years - It is assumed that it will take approximately 3-5 years to achieve the desired species diversity, vegetation cover and weed density. For the purposes of the calculation, it is assumed that full ecological benefit will be achieved at 10 years.
Confidence in rehabilitation result (%)	90%
Rehabilitation credit	0.19 ha
Significant residual impact	-0.03 ha

Table 4 ***Offset calculation inputs - Callitris preissii (or Melaleuca lanceolata) Woodlands and Forests of the Swan Coastal Plain TEC (Vulnerable)***

Residual impact (Step 2) Inputs	
Description	Land purchase of 0.55 ha of *Callitris preissii* (or *Melaleuca lanceolata*) Woodlands and Forests of the Swan Coastal Plain TEC to be placed into conservation covenant
Current quality of offset site	A quality of 7 has been applied on the assumption that *Callitris preissii* (or *Melaleuca lanceolata*) Woodlands and Forests of the Swan Coastal Plain TEC in Good to Very Good condition would be the minimum required to meet the conditions for consideration as an offset site.
Future quality without offset	A value of 7 was applied on the assumption that the vegetation condition would not change without offset.
Future quality with offset	No land management is proposed as part of this offset proposal, however as the site will be placed into conservation covenant, it is assumed that standard DBCA practices such as fencing and weed control would be applied and quality will be maintained or improved. A value of 7 was utilised.
Time until ecological benefit (years)	1 year – this reflects that the land purchase is likely to take 12 months.
Confidence in offset result (%)	90% - the Offset Fund is a well established system for identification and purchase of offset land for placement into conservation covenant.
Duration of offset implementation (maximum 20 years)	20 years is applied as it is assumed that the offset site will be placed into conservation covenant and managed by DBCA in perpetuity.
Time until offset site secured	1 year
Risk of future loss without offset	30% - there is a moderate risk of loss without offset
Risk of future loss with offset	10% - there is a low risk of loss with offset
Offset value	0.08/264.2%
Offset adequate	Yes

Table 5 ***Conservation significance inputs - Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain TEC and PEC (Critically Endangered and Priority 3)***

Conservation significance (Step 1) Inputs	
Description	1.59 ha of Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain TEC and PEC (Critically Endangered and Priority 3)
Type of environmental value	Ecological community
Conservation significance of environmental value	The Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain ecological community is Critically Endangered under the EPBC Act. As per the WA *Environmental offsets metric: Quantifying environmental offsets in Western Australia* (GoWA 2021b), the highest level of threat has been utilised.
Conservation significance score	6.8%

Table 6 ***Residual impact inputs - Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain TEC and PEC (Critically Endangered and Priority 3)***

Residual impact (Step 2) Inputs	
Description	Revegetation is proposed to be undertaken at two Degraded to completely cleared locations within Woodman Point Reserve to partially offset the clearing of 1.59 ha of clearing of Tuart *(Eucalyptus gomphocephala)* woodlands and forests of the Swan Coastal Plain TEC and PEC
Significant impact (hectares)	1.59 ha of clearing of Tuart *(Eucalyptus gomphocephala)* woodlands and forests of the Swan Coastal Plain TEC and PEC
Quality (scale)	A vegetation condition of 3 has been assigned, taking into account the condition of the vegetation in the project area (0.27 ha is in Good condition, 1.3 ha is in Degraded condition and 0.02 ha is in Completely Degraded condition). In addition, the majority of the Tuart *(Eucalyptus gomphocephala)* woodlands and

Residual impact (Step 2) Inputs	
	forests of the Swan Coastal Plain TEC and PEC in the project area is planted by DBCA in the last ~10 years (Pers Comms DBCA, 2021).
Quantum of impact	0.48 ha
Proposed rehabilitation (area in hectares)	0.36 ha of revegetation of Tuart *(Eucalyptus gomphocephala)* woodlands and forests of the Swan Coastal Plain TEC and PEC.
Current quality of rehabilitation site	3 - The land to be revegetated is in Degraded or worse condition
Future Quality without rehabilitation	3 - Condition is unlikely to change without the proposed offset.
Future Quality with rehabilitation	7 - A Revegetation Management Plan will be prepared in consultation with DBCA including agreed upon completion criteria. It is assumed that vegetation will be condition 7 or higher upon meeting these completion criteria
Time until ecological benefit (years)	10 years - It is assumed that it will take approximately 3-5 years to achieve the desired species diversity, vegetation cover and weed density. For the purposes of the calculation, it is assumed that full ecological benefit will be achieved at 10 years.
Confidence in rehabilitation result (%)	90%
Rehabilitation credit	0.07 ha
Significant residual impact	0.41 ha

Table 7 ***Offset calculation inputs - Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain TEC and PEC (Critically Endangered and Priority 3)***

Residual impact (Step 2) Inputs	
Description	Land purchase of 3.2 ha of Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain TEC and PEC to be placed into conservation covenant
Current quality of offset site	A quality of 7 has been applied on the assumption that Tuart *(Eucalyptus gomphocephala)* woodlands and forests of the Swan Coastal Plain TEC and PEC in Good to Very Good condition would be the minimum required to meet the conditions for consideration as an offset site.
Future quality without offset	A value of 7 was applied on the assumption that the vegetation condition would not change without offset.
Future quality with offset	No land management is proposed as part of this offset proposal, however as the site will be placed into conservation covenant, it is assumed that standard DBCA practices such as fencing and weed control would be applied and quality will be maintained or improved. A value of 7 was utilised.
Time until ecological benefit (years)	1 year – this reflects that the land purchase is likely to take 12 months.
Confidence in offset result (%)	90% - the Offset Fund is a well established system for identification and purchase of offset land for placement into conservation covenant.
Duration of offset implementation (maximum 20 years)	20 years is applied as it is assumed that the offset site will be placed into conservation covenant and managed by DBCA in perpetuity.
Time until offset site secured	1 year
Risk of future loss without offset	30% - there is a moderate risk of loss without offset
Risk of future loss with offset	10% - there is a low risk of loss with offset
Offset value	0.42/102.3%
Offset adequate	Yes

Table 8 Conservation significance inputs – Bush Forever

Conservation significance (Step 1) Inputs	
Description	1.23 ha of native vegetation in Good condition within Bush Forever Site 341
Type of environmental value	Conservation area
Conservation significance of environmental value	Bush Forever site
Conservation significance score	A conservation significance score does not apply in this case, an offset ratio is appropriate
Area to be placed in conservation covenant	3.2 ha
Offset ratio	3:1
Offset adequate	Yes

3.1 Offset condition milestones

Condition Milestone 1 – Discovery Parks shall provide documentary evidence to the CEO of DWER that a Revegetation Management Plan has been developed and agreed between Discovery Parks and DBCA within 12 months of clearing commencement.

Timeframe for Completion – Within 12 months of clearing commencement

Condition Milestone 2 – Discovery Parks shall provide documentary evidence to the CEO of DWER that funds have been provided to the Offset Fund for the purposes of purchasing 3.2 ha of land suitable for conservation.

Timeframe for Completion – Within 12 months of clearing commencement

4. Application of Environmental Offsets Policy Principles

The WA Environmental Offsets Policy (Government of Western Australia, 2011) states that environmental offsets are to be used as a last resort, and details six principles to be applied in the assessment and decision making with respect to offsets.

The application of the environmental offset policy principles to the project Offset Proposal is provided in Table 9.

Table 9 Application of WA Environmental Offset Policy Principles to the Offset Proposal

Principle No.	Principle	Comment
1.	Environmental offsets will only be considered after avoidance and mitigation options have been pursued.	All strategies to avoid and mitigate environmental impacts have been explored and implemented as detailed in Section 1.4 including: – Minimise the impacts and maintain ecological linkages by locating the project area within previously disturbed areas. – Avoidance of ecological communities has been undertaken where possible. – A bushfire management area will be applied around the proposed caravan park construction area. To avoid excess clearing, mature trees within the bushfire management zone will be retained, with groundcover and mid-story vegetation removed. – Clearing will be restricted to the minimum area required for construction works and will be clearly demarcated on site to prevent accidental clearing.

Principle No.	Principle	Comment
		– A Construction Environmental Management Plan (CEMP) will be prepared by the contractor for the Project. The CEMP will include specific management actions, mitigation measures and Project responsibilities.
2	Environmental offsets are not appropriate for all projects.	Environmental offsets are required when a significant residual impact remains (Department of Environment Regulation, 2014). A significant residual impact remains for this Project after the application of avoidance and mitigation options and, therefore, an offset is appropriate for this Project.
3.	Environmental offsets will be cost effective, as well as relevant and proportionate to the significance of the environmental value being impacted.	Discovery Parks believes the proposed offset represents a cost-effective solution that is proportionate to the environmental value being impacted by the Project. The areas to be revegetated will provide environmental values that are equal or of higher value than the vegetation proposed to be cleared within the project footprint. The purchase of land will increase the conservation reserve in Western Australia.
4.	Environmental offsets will be based on sound environmental information and knowledge.	The selection of offset revegetation locations have been undertaken in consultation with DBCA. Further, DBCA is an experienced land manager and has successfully undertaken similar revegetation within the Woodman Point Regional Park in the past. Sound environmental knowledge will be used in the development of the revegetation completion criteria which will also be determined in consultation with local DBCA officers and subject matter experts. Purchase of land will be undertaken by DBCA utilising the financial contribution to the Offset Fund. DBCA is experienced in the identification and purchase of conservation land. Identification of suitable offset land will include survey for the two ecological communities.
5.	Environmental offsets will be applied within a framework of adaptive management.	The land to be revegetated is within the existing conservation estate and will be managed in accordance with advances in environmental knowledge and understanding as typically applied to conservation reserve including weed control and fencing. The land to be purchased will be placed into conservation reserve and managed accordingly.
6.	Environmental offsets will be focussed on longer term strategic outcomes.	The proposed offset has been developed in consultation with DBCA to achieve long term strategic outcomes, specifically maintaining and improving the environmental values of the Woodman Point Regional Park. The proposed revegetation will increase the availability of habitat for fauna including Black Cockatoo as well as contributing to the abundance of TEC and PEC communities in the state. The purchase of conservation land will increase the protection of TEC and PEC communities in conservation reserve for long term management.

5. Application of with State Planning Policy 2.8 Offset criteria

State Planning Policy 2.8 *Bushland policy for the Perth Metropolitan Region* provides an implementation framework to ensure bushland protection and management issues in the Perth Metropolitan Region are appropriately addressed and integrated with broader land use planning and decision-making. The Project will be subject to a Negotiated Planning Outcome as a result of multiple State agencies having a vested interest in the project site. Consultation with DPLH has identified that the proposed offset for the project must comply with Appendix 4 of SPP 2.8, Bush Forever areas (all) Offsets Criteria.

SPP 2.8 specifies -

If any clearing of native vegetation within the Bush Forever area is to occur, then the applicant needs to provide proposed offset measures (both on-site and off-site), where appropriate and practical… The offset package should provide for a net environmental gain.

A presumption against clearing in Bush Forever is typically expected, except where the land has an existing planning commitment, such as the specified expansion of the existing caravan park detailed in the Woodman Point Regional Park Management Plan (DBCA 2010).

SPP 2.8 specifies offset criteria according to conservation significance. This is based on the environmental attributes of the site on a case-by-case basis, assessing attributes such as vegetation complex type, presence of TECs, significant flora and fauna, conservation category wetlands and condition of vegetation.

The conservation significance of the Project area is identified as 'Medium', taking into account the following factors:

- Five vegetation types were identified in the biological survey of the site, two of these are native vegetation comprising of Good (1.23 ha) and Completed Degraded (0.07 ha) condition.
- The vegetation surveys (GHD 2020a, GHD 2020b) identified that the majority of the project area was considered to be in Degraded or Completely Degraded condition (2.24 ha, 64.4%). The remaining vegetation is non-native/planted and the site has been highly impacted by past land uses.
- The Project area intersects one regional ecological linkage mapped in the Regional Ecological Linkages for the Perth Metropolitan Region dataset. Link No. 76 intersects the majority of the project area and links into ecological linkage numbers 35, 51, 53, 50. The proposed clearing will not sever the linkage.
- Prescence of vegetation constituting Tuart (*Eucalyptus gomphocephala*) Woodlands and Forests of the Swan Coastal Plain PEC and *Callitris preissii (or Melaleuca lanceolata*) Woodlands and Forests of the Swan Coastal Plain TEC. The majority of this is planted by DBCA, with only 0.33 ha of the Tuart TEC/PEC and only 0.15 ha of the Callitris TEC comprising of native vegetation.
- Loss of approximately 1.53 ha of low to moderate quality foraging habitat for Black Cockatoos. Of this, 0.15 ha is native vegetation, the remainder was revegtation/planted.
- The Project area also contains three potential breeding trees (Tuart with a > 500 mm DBH) with no visible hollows.
- No conservation category wetlands are present in the Project area.

Table 10 identifies the offset proposal criteria, and compliance with SPP 2.8, demonstrating the proposed net environmental gain.

Table 10 Compliance with SPP 2.8

Criteria	Medium level conservation significance	Assessment
If some clearing is to be permitted, the following offset requirements must be met:		
Net Outcome	Equivalent gain i.e. at least 1 x the calculated loss in habitat hectares	Offset calculations have been based on the WA Environmental Offsets Calculator. This provides a greater than 1:1 offset ratio. A total of 1.34 ha will be revegetated and 3.2 ha purchased for

Criteria	Medium level conservation significance	Assessment
		placement in conservation reserve. The proposed offset will have a net gain in terms of both hectares, and vegetation and fauna habitat quality.
Formal agreement to achieve and secure offset	Requirements to achieve offsets must be identified in the associated management agreements and / or the permit conditions. Gains must be of an on-going and secure nature. Once achieved the offset must be maintained and the relevant planning authorities must maintain adequate and readily accessible records of agreed offset arrangements.	The proposed offset will revegetate 1.34 ha of land in the conservation estate, meeting completion criteria agreed with DBCA. It is expected that the clearing permit conditions will include the requirement to a) complete a Revegetation Management Plan in consultation with DBCA and b) undertake the revegetation of 1.34 ha of Degraded condition land until completion criteria are met. In addition, the purchase of land has been proposed as a milestone for the clearing permit, including purchase of 3.2 ha for placement in conservation covenant for future management by DBCA. A record of the offset will be maintained on the DWER Offset Register.
Vegetation or habitat type of offset	The same vegetation / habitat type OR a Very High significance vegetation / habitat in the same Bioregion.	The proposed offset revegetation will be located in 2 sites within the Woodman Point Regional Park. Revegetation will be like for like and have an increase in habitat quality and vegetation condition in comparison to the project location. Revegetation will include: - 0.36 ha of Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain PEC - 1.34 ha of *Callitris preissii* (or *Melaleuca lanceolata*) Woodlands and Forests of the Swan Coastal Plain TEC In addition to this, land purchase is proposed to facilitate the remainder of the offset for this project. Discovery Parks will provide funds to the Offset Fund for the purchase of 3.2 ha of land to be placed in conservation covenant. This land would include: – 0.55 ha of *Callitris preissii* (or *Melaleuca lanceolata*) Woodlands and Forests of the Swan Coastal Plain TEC – 3.2 ha of Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain PEC
Landscape role	Similar or more effective land protection function as impacted by the loss.	The project area is located on land that is vested as a conservation reserve, Bush Forever and an ESA. The land is currently managed by DBCA. It is proposed that the revegetation sites will be within Woodman Point Regional Park and have the same land protections. Land purchased as part of this offset package would also have the same level of protection.
Quality objectives for offset	The existing vegetation proposed as the basis of an offset must be at least 50% of the quality in the area being lost.	The vegetation surveys (GHD 2020a, GHD 2020 b) identified that the majority of the project area was considered to be in Degraded or Completely Degraded condition (2.24 ha, 64.4%). A small portion of the Project area was assessed to be in Good condition (1.24 ha, 35.6%). The offset is based upon the environmental values of the Good to Very Good condition vegetation (value of 7).
The proportion of revegetation included in the offset (in habitat hectares) is limited to	50%	The proposed revegetation for the project provides a 29.5% offset for this project, with the remaining 70.5% provided by land purchase.
Large old tree objective for offset	**For remnant patches of native vegetation that contain large mature trees -** For each large mature tree removed as part of the permitted clearing:	In absence of guidance regarding the size parameters of large and medium trees, it is assumed that a large tree is one that meets the size requirements of a breeding tree for Black Cockatoos (SEWPAC 2012), being >DBH 500mm. A medium tree is assumed to be 300mm to 500mm DBH.

Criteria	Medium level conservation significance	Assessment
	- 2 other large mature trees to be protected AND 10 new trees to be planted For each medium mature tree removed as part of permitted clearing: - 1 other large mature trees to be protected AND 5 new trees to be planted	Three trees with a DBH of 500mm will be cleared for this project. More than 6 trees will be planted as part of the proposed revegetation offset. Medium sized trees were not recorded during the GHD survey, however it is assumed that 1.34 ha of revegetation will meet the requirements for tree planting for both large and medium trees.
Vicinity	Gains must be in the same bioregion as the loss OR an adjacent bioregion if offsets are in Very High or High significance vegetation.	The vegetation proposed to be cleared is not Very high or High significance. The proposed revegetation offset will be undertaken in the Woodman Point Regional Park. The land purchase offset will emphasise the identification of land on the Swan Coastal Plain where possible, however it is acknowledged that in a highly cleared landscape identification of the environmental values to be offset (*Callitris preissii* (or *Melaleuca lanceolata*) Woodlands and Forests of the Swan Coastal Plain TEC and Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain PEC) will take precedence over bioregion.
Timing	Offsets to be initiated prior to the loss	As per Section 3.1, the clearing permit will detail offset milestones to be undertaken within 12 months of clearing commencement. This is considered to be low risk as the majority of the vegetation in the project area is planted by DBCA. Revegetation would commence in the following winter to allow for sufficient rainfall for establishment.

6. Stakeholder consultation

Discovery Parks has been liaising with the DBCA regarding leasing of the Project site since 2019. Consultation has also been undertaken with the Strategy and Engagement division of DPLH in relation to the execution of a Negotiated Planning Outcome, and the required offset for the Bush Forever aspect of the Project. Recent consultation has been undertaken with DBCA for the proposed revegetation offset including identification of revegetation locations.

7. References

Department of Parks and Wildlife 2010, *Woodman Point Regional Park Management Plan*, Perth, Department of Parks and Wildlife. Retrieved from https://www.dpaw.wa.gov.au/images/documents/parks/management-plans/decarchive/woodman_pt_mgmt_plan_-_draft_9_web_feb_10.pdf

Department of Sustainability, Environment, Water, Population and Communities 2012, *How to use the offsets assessment guide*. Retrieved from https://www.environment.gov.au/system/files/resources/12630bb4-2c10-4c8e-815f-2d7862bf87e7/files/offsets-how-use.pdf

GHD 2021, Woodman Point Caravan Park Expansion Environmental Impact Assessment, prepared for Discovery Parks December 2021

GHD 2020a, *Woodman Point Caravan Park Expansion, Flora and Fauna Survey*, unpublished report prepared for Discovery Parks.

GHD 2020b, *Additional vegetation survey*, unpublished memorandum prepared for Discovery Parks.

Government of Western Australia (GoWA) 2011, *WA Environmental Offsets Policy*. Retrieved from https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/WAEnvOffsetsPolicy-270911.pdf

GoWA 2000, Bush Forever Volume 2, Government of WA, 2000

GoWA 2014, *WA Environmental Offsets Guidelines*. Retrieved on https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/WA%20Environmental%20Offsets%20Guideline%20August%202014.pdf

GoWA 2021a, DWER WA environmental offsets calculator, Department of Water and Environmental Regulation October 2021

GoWA 2021b, WA *Environmental offsets metric: Quantifying environmental offsets in Western Australia* , Department of Water and Environmental Regulation October 2021

Tourism WA 2020, Tourism Western Australia, Annual report 2019-20. Retrieved from https://www.tourism.wa.gov.au/Publications%20Library/About%20us/Annual%20Report%202019-20.pdf

Western Australian Planning Commission 2010, *State Planning Policy 2.8: Bushland Policy for the Perth Metropolitan Region*. Retrieved from https://www.dplh.wa.gov.au/getmedia/9b39f435-a6dc-4e2b-aaca-caba06a84aeb/SPP_2-8_bushland_policy_perth_metro

Appendix A

WA Environmental Offsets Calculator Inputs

WA Environmental Offsets calculator

PLEASE ENABLE MACROS FOR THIS SPREADSHEET

Produced by:

The Department of Water and Environmental Regulation (DWER) in consultation with stakeholder working groups

Purpose:

Use the WA Envirionmental Offsets calculator in conjunction with the *Environmental offsets metric: Quantifying environmental offsets in Western Australia* guideline. Together, they form a supplement to section 4 of the *WA Environmental Offsets Guidelines* and provide information to help decision-makers, government officers, industry and the community to quantify environmental offsets.

Data currency:

The correct application of the WA Environmental Offsets Calculator relies on access to current datasets (such as vegetation extent and land tenure).

Process for using the WA Environmental Offsets Calculator		
Step	**Worksheet**	**Component**
Step 1: Determining conservation significance	**Step1_ConservationSignificance**	**Conservation significance determination**
		Combined *area* / *feature*
Step 2: Calculating significant residual impact	**Step2_SignificantResidualImpact**	**Part A: Significant impact calculation**
		Separate *area* or *feature* calculations
		Part B: Rehabilitation credit calculation
		Separate *area* or *feature* calculations
		Part C: Significant residual impact calculation
		Separate *area* or *feature* calculations
Step 3: Calculating offsets	**Step3_Offsets**	**Offsets calculation**
		Separate *area* or *feature* calculations
Rationale for scores used in the Offsets Calculator	**Rationale**	**All**

Step 1: Determining conservation significance

Key:
- Data to be entered
- Drop-down selection
- Automatically-generated scores

(Or, if appropriate, manual data entry permitted)

Area / feature **(Impact site)**

Conservation significance determination for the environmental value impacted		
Conservation significance	**Description**	0.55 ha of clearing of Callitris preissii (or Melaleuca lanceolata) Woodlands and Forests of the Swan Coastal Plain TEC
	Type of environmental value	Ecological community
	Conservation significance of environmental value	Threatened ecological community - vulnerable
	Conservation significance score	**0.2%**

Please select *area* or *feature* for the calculations	**Area**

Step 2: Calculating significant residual impact

Key:
- Data to be entered
- Drop-down selection
- Automatically-generated scores

Environmental value (step 1)	0.55 ha of clearing of Callitris preissii (or Melaleuca lanceolata) Woodlands and Forests of the Swan Coastal Plain TEC

Area **(impact site)**

Part A: Significant impact calculation *Area*

Significant impact	Description	Quantum of impact	
	revegetaton of degraded areas within Woodman Point reserve	Significant impact (hectares)	0.55
		Quality (scale)	3.00
		Total quantum of impact	0.17

Part B: Rehabilitation credit calculation *Area* (onsite)

Rehabilitation Credit	Description				
		Proposed rehabilitation (area in hectares)	0.55	Time until ecological benefit (years)	10.00
		Current quality of rehabilitation site (scale)	3.00	Confidence in rehabilitation result (%)	90.0%
		Future quality WITHOUT rehabilitation (scale)	3.00	Rehabilitation credit	0.19
		Future quality WITH rehabilitation (scale)	7.00		

Part C: Significant residual impact calculation *Area*

Significant residual impact		
	Total quantum of impact	0.17
	Rehabilitation credit	0.19
	Significant residual impact	-0.03

WA Environmental Offsets Calculator

Step 3: Calculating offsets

Key:

	Data to be entered
	Drop-down selection
	Automatically-generated scores

Environmental value (step 1)	0.55 ha of clearing of Callitris preissii (or Melaleuca lanceolata) Woodlands and Forests of the Swan Coastal Plain TEC	Significant impact (step 2, part A)	0.55
		Rehabilitation credit (step 2, part B)	0.19
		Significant residual impact (step 2, part C)	-0.03

***Area* (offset site)**

Offset calculation *Area*							
Offsets calculation	Description	Proposed offset (area in hectares)	0.55	Duration of offset implementation (maximum 20 years)	20.00	Offset value (applied to step 2, part C)	0.08
	Land purchase	Current quality of offset site (scale)	7.00	Time until offset site secured (years)	1.00		-264.2%
		Future quality WITHOUT offset (scale)	7.00	Risk of future loss WITHOUT offset (%)	30.0%		
		Future quality WITH offset (scale)	7.00	Risk of future loss WITH offset (%)	10.0%		
		Time until ecological benefit (years)	1.00				
		Confidence in offset result (%)	90.0%			OFFSET ADEQUATE?	YES

WA Environmental Offsets calculator

PLEASE ENABLE MACROS FOR THIS SPREADSHEET

Produced by:

The Department of Water and Environmental Regulation (DWER) in consultation with stakeholder working groups

Purpose:

Use the WA Envirionmental Offsets calculator in conjunction with the *Environmental offsets metric: Quantifying environmental offsets in Western Australia* guideline. Together, they form a supplement to section 4 of the *WA Environmental Offsets Guidelines* and provide information to help decision-makers, government officers, industry and the community to quantify environmental offsets.

Data currency:

The correct application of the WA Environmental Offsets Calculator relies on access to current datasets (such as vegetation extent and land tenure).

Process for using the WA Environmental Offsets Calculator		
Step	**Worksheet**	**Component**
Step 1: Determining conservation significance	**Step1_ConservationSignificance**	**Conservation significance determination**
		Combined *area* / *feature*
Step 2: Calculating significant residual impact	**Step2_SignificantResidualImpact**	**Part A: Significant impact calculation**
		Separate *area* or *feature* calculations
		Part B: Rehabilitation credit calculation
		Separate *area* or *feature* calculations
		Part C: Significant residual impact calculation
		Separate *area* or *feature* calculations
Step 3: Calculating offsets	**Step3_Offsets**	**Offsets calculation**
		Separate *area* or *feature* calculations
Rationale for scores used in the Offsets Calculator	**Rationale**	**All**

Step 1: Determining conservation significance

Key:
- Data to be entered
- Drop-down selection
- Automatically-generated scores

(Or, if appropriate, manual data entry permitted)

***Area / feature* (Impact site)**

Conservation significance determination for the environmental value impacted		
Conservation significance	Description	1.59 ha of Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain TEC and PEC (Critically Endangered and Priority 3)
	Type of environmental value	Ecological community
	Conservation significance of environmental value	Threatened ecological community - critically endangered
	Conservation significance score	6.8%

Please select *area* or *feature* for the calculations	Area

Step 2: Calculating significant residual impact

Key:
- Data to be entered
- Drop-down selection
- Automatically-generated scores

Environmental value (step 1)	1.59 ha of Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain TEC and PEC (Critically Endangered and Priority

Area **(impact site)**

Part A: Significant impact calculation *Area*

Significant impact	Description	Quantum of impact	
	revegetaton of degraded areas within Woodman Point reserve	Significant impact (hectares)	1.59
		Quality (scale)	3.00
		Total quantum of impact	0.48

Part B: Rehabilitation credit calculation *Area* (onsite)

Rehabilitation Credit	Description				
		Proposed rehabilitation (area in hectares)	0.36	Time until ecological benefit (years)	10.00
		Current quality of rehabilitation site (scale)	3.00	Confidence in rehabilitation result (%)	90.0%
		Future quality WITHOUT rehabilitation (scale)	3.00	Rehabilitation credit	0.07
		Future quality WITH rehabilitation (scale)	7.00		

Part C: Significant residual impact calculation *Area*

Significant residual impact		
	Total quantum of impact	0.48
	Rehabilitation credit	0.07
	Significant residual impact	0.41

WA Environmental Offsets Calculator

Step 3: Calculating offsets

Key:	
	Data to be entered
	Drop-down selection
	Automatically-generated scores

Environmental value (step 1)	1.59 ha of Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain TEC and PEC (Critically Endangered and Priority	Significant impact (step 2, part A)	1.59
		Rehabilitation credit (step 2, part B)	0.07
		Significant residual impact (step 2, part C)	0.41

***Area* (offset site)**

Offset calculation *Area*							
Offsets calculation	Description	Proposed offset (area in hectares)	3.20	Duration of offset implementation (maximum 20 years)	20.00	Offset value (applied to step 2, part C)	0.42
	Land purchase	Current quality of offset site (scale)	7.00	Time until offset site secured (years)	1.00		102.3%
		Future quality WITHOUT offset (scale)	7.00	Risk of future loss WITHOUT offset (%)	30.0%		
		Future quality WITH offset (scale)	7.00	Risk of future loss WITH offset (%)	10.0%		
		Time until ecological benefit (years)	1.00				
		Confidence in offset result (%)	90.0%			OFFSET ADEQUATE?	YES

WA Environmental Offsets calculator

PLEASE ENABLE MACROS FOR THIS SPREADSHEET

Produced by:

The Department of Water and Environmental Regulation (DWER) in consultation with stakeholder working groups

Purpose:

Use the WA Envirionmental Offsets calculator in conjunction with the *Environmental offsets metric: Quantifying environmental offsets in Western Australia* guideline. Together, they form a supplement to section 4 of the *WA Environmental Offsets Guidelines* and provide information to help decision-makers, government officers, industry and the community to quantify environmental offsets.

Data currency:

The correct application of the WA Environmental Offsets Calculator relies on access to current datasets (such as vegetation extent and land tenure).

Process for using the WA Environmental Offsets Calculator		
Step	**Worksheet**	**Component**
Step 1: Determining conservation significance	**Step1_ConservationSignificance**	**Conservation significance determination**
		Combined *area* / *feature*
Step 2: Calculating significant residual impact	**Step2_SignificantResidualImpact**	**Part A: Significant impact calculation**
		Separate *area* or *feature* calculations
		Part B: Rehabilitation credit calculation
		Separate *area* or *feature* calculations
		Part C: Significant residual impact calculation
		Separate *area* or *feature* calculations
Step 3: Calculating offsets	**Step3_Offsets**	**Offsets calculation**
		Separate *area* or *feature* calculations
Rationale for scores used in the Offsets Calculator	**Rationale**	**All**

Step 1: Determining conservation significance

Key:
- Data to be entered
- Drop-down selection
- Automatically-generated scores

(Or, if appropriate, manual data entry permitted)

Area / feature **(Impact site)**

Conservation significance determination for the environmental value impacted		
Conservation significance	Description	1.23 ha of native vegetation in Good condition within a Bush Forever Site 341
	Type of environmental value	Conservation area
	Conservation significance of environmental value	Bush Forever site
	Conservation significance score	A conservation significance score does not apply in this case; an offset ratio may be appropriate (step 3)

Please select *area* or *feature* for the calculations	Area

Step 2: Calculating significant residual impact

Key:
- Data to be entered
- Drop-down selection
- Automatically-generated scores

Environmental value (step 1)	1.23 ha of native vegetation in Good condition within a Bush Forever Site 341

Area **(impact site)**

Part A: Significant impact calculation *Area*

Significant impact	Description	Quantum of impact	
	revegetaton of degraded areas within Woodman Point reserve	Significant impact (hectares)	
		Quality (scale)	
		Total quantum of impact	0.00

Part B: Rehabilitation credit calculation *Area* (onsite)

Rehabilitation Credit	Description				
		Proposed rehabilitation (area in hectares)		Time until ecological benefit (years)	
		Current quality of rehabilitation site (scale)		Confidence in rehabilitation result (%)	
		Future quality WITHOUT rehabilitation (scale)		Rehabilitation credit	0.00
		Future quality WITH rehabilitation (scale)			

Part C: Significant residual impact calculation *Area*

Significant residual impact		
	Total quantum of impact	0.00
	Rehabilitation credit	0.00
	Significant residual impact	0.00

WA Environmental Offsets Calculator

Step 3: Calculating offsets

Key:	
	Data to be entered
	Drop-down selection
	Automatically-generated scores

Environmental value (step 1)	1.23 ha of native vegetation in Good condition within a Bush Forever Site 341	Significant impact (step 2, part A)	0.00
		Rehabilitation credit (step 2, part B)	0.00
		Significant residual impact (step 2, part C)	0.00

Area **(offset site)**

Offset calculation *Area*							
Offsets calculation	Description	Proposed offset (area in hectares)		Duration of offset implementation (maximum 20 years)			
	Land purchase	Current quality of offset site (scale)		Time until offset site secured (years)			
		Future quality WITHOUT offset (scale)		Risk of future loss WITHOUT offset (%)		Offset value Conservation area (applied to step 2, part A)	3.2
		Future quality WITH offset (scale)		Risk of future loss WITH offset (%)			#DIV/0!
		Time until ecological benefit (years)					
		Confidence in offset result (%)				OFFSET ADEQUATE?	YES

This report: has been prepared by GHD for Discovery Parks and may only be used and relied on by Discovery Parks for the purpose agreed between GHD and Discovery Parks as set out in Section 1.3 of this report.

GHD otherwise disclaims responsibility to any person other than Discovery Parks arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (refer Section 2.2 of this report). GHD disclaims liability arising from any of the assumptions being incorrect.

ghd.com

→ The Power of Commitment

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

GUIDELINE

Clearing of native vegetation Offsets procedure

Under the Environmental Protection Act 1986

DER2014/001250

Produced and published by
Department of Environment Regulation
168 St Georges Terrace, Perth, Western Australia

August 2014

Disclaimer
The information contained in this document is provided by Department of Environment Regulation in good faith. However, there is no guarantee of the accuracy of the information contained in this document and it is the responsibility of users to make their own enquiries as to its accuracy, currency, relevance and correctness.

The State of Western Australia and Department of Environment Regulation and their servants and agents expressly disclaim liability, in negligence or otherwise, for any act or omission occurring in reliance on the information contained in this document, or for any incident or consequential loss or damage of such act or omission.

The State of Western Australian is committed to providing quality information and has made every attempt to ensure the accuracy, currency, reliability and correctness of the information contained in this document. However, changes in circumstances and legislation after the time of publication may impact on the correctness or quality of this information.

In addition the accuracy, currency, reliability and correctness of links or references to information sources referred to or provided by third parties is outside the control of State of Western Australia and it is therefore the responsibility of the user to make their own decisions on information found on those external sites. Confirmation of any of the information provided in this document may be sought from the relevant originating bodies or the department providing the information; however, users of this material should verify all relevant representations, statements and information with their own professional advisers.

The State of Western Australia and Department of Environment Regulation reserve the right to amend the content of this document at any time without notice.

The information contained in this document is general. It does not constitute, and should be not relied on as legal advice. The State of Western Australia recommends seeking advice from a qualified lawyer on the legal issues affecting you before relying on this information or acting on any legal matter.

Questions regarding this report should be directed to:

Department of Environment Regulation
Locked Bag 33 Cloisters Square
PERTH 6850

Phone: +61 8 6467 5000
Fax: +61 6467 5562
Email: info@der.wa.gov.au
Web: www.der.wa.gov.au

Accessibility This document is available in alternative formats upon request.

Contents

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 State Environmental Offsets Policy and State Environmental Offsets Guidelines, guidance on the matters taken into consideration under each policy principle is provided in Appendix A. 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.

1. 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 Appendix A.
3. A guide to preparing revegetation plans is available from www.der.wa.gov.au/nvp.
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.

> 51I 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 Appendix A.

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
Applicant:	
Phone numbers:	Rick Thurling
Email:	rthurling@discoveryparks.com.au
Contact person or environmental specialist:	
Name:	Rick Thurling
Company:	Discovery Parks
Phone numbers:	08 8219 3083 0477 899 166
Email:	rthurling@discoveryparks.com.au
Environmental specialist's qualifications or equivalent, and relevant experience:	Senior Project Manager
Purpose of clearing:	To construct an extension for Woodman Point Caravan Park
Land details of the clearing application area:	Lot 304 (No. 128) Crown Reserve R 49220
Total area of the proposed clearing (hectares):	1.3 ha native vegetation

2. Proposed on site mitigation (if applicable)	
Area (ha) / number of trees to be planted:	
Other on ground management actions proposed:	
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)	

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:	To be determined
Area (ha) or number of trees at site prior to offset being undertaken:	5 ha
Type of offset: (rehabilitation and revegetation, on ground management or land acquisition)	Revegetation Financial offset for the purpose of land acquisition
Current scheme zoning: (region or local scheme)	Parks and Recreation
Are there any development approvals? (for example, extractive industry license or *Environment Protection and Biodiversity Conservation Act 1999* approval)	N/A
Future tenure and/or zoning: (e.g. proposed to change local council reserve from recreation to conservation purposes)	Conservation covenant
Current vegetation condition (Keighery scale):	Assumed a condition of 7 (Very Good) or above
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):	8 (Very Good-Excellent following planting and fencing)
Proposed commencement date of rehabilitation and revegetation and/or other on ground management:	Within 1 year of acquisition of site

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)	1 winter post-commencement
Proposed date of land acquisition or method of securing the tenure of the site:	Purchase
Is the environmental survey of the offset site attached?	No
Is a revegetation plan attached (if required)?	No
Is the spatial data for the location of the offset site provided (ESRI shapefile format)?	N/a
Is the spatial data for the environmental survey of the offset site provided (ESRI shapefile format) (vegetation condition and type, locations of habitat trees)	N/a
Estimated cost of the offset:	Unknown

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.

All strategies to avoid and mitigate environmental impacts have been explored and implemented as detailed in Section 1.5 of the Offset Proposal including:
– minimise the impacts and maintain ecological linkages by locating the Project area within previously disturbed areas.
– Avoidance of ecological communities has been undertaken where possible.
– A bushfire management area will be applied around the proposed caravan park construction area. To avoid excess clearing, all mature trees within the bushfire management zone will be retained, with groundcover and mid-story vegetation removed.
– Clearing will be restricted to the minimum area required for construction works and will be clearly demarcated on site to prevent accidental clearing.
– A Construction Environmental Management Plan (CEMP) will be prepared by the contractor for the Project. The CEMP will include specific management actions, mitigation measures and Project responsibilities.

A residual impact remains to Principle 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.

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 principle(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.

Discovery Parks believes the proposed offset represents a cost-effective solution that is proportionate to the environmental value being impacted by the Project. The area to be purchased (5 ha) with the financial contribution will consist of environmental values that are equal or of higher value than the vegetation proposed to be cleared within the Project footprint.

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)

Funds will be provided for the purchase of land of suitable environmental values as close as practical to the location of clearing. The selection and management of land to be purchased will be based on sound environmental information and knowledge and commensurate with DBCA conservation objectives for the region. See attached Offset Proposal.

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).

Funds will be provided for the purchase of land of suitable environmental values. The land will be added to the conservation estate and will be managed in accordance with advances in environmental knowledge and understanding as typically applied to conservation reserve by DBCA including weed control and fencing.

5. 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.

The proposed offset will contribute to the Offset Fund established by DWER under the EP Act for the acquisition of offset sites. Land to be purchased with offset funds will be added to the conservation estate to be managed by DBCA. Available land for purchase will be reviewed by DBCA in accordance with their long-term strategic outcomes for conservation in the region.

5. Ongoing commitments and consultation	
Monitoring commitment (including costs): (Note: you may refer to the revegetation plan here, if applicable, rather than repeat information.)	As per DWER standard management of conservation reserves
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:	Consultation 1. DPLH - Bush Forever branch 2. DBCA - Regional Manager

6. Other	
Please note that contaminated site/s classified under the *Contaminated Sites Act 2003* (past refuse disposal facilitates, maintenance yards) are not considered to be suitable offset sites	☑ Noted
You must ensure all laws are complied with (e.g. *Native Title Act 1993*) 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.	☑ Noted
The agreed offset proposal document and revegetation plan may be published on the WA Environmental Offsets Register.	☑ Noted