



1. Application details

1.1. Permit application details

Permit application No.: 7487/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: Shire of Esperance
Application received: 17 February 2017

1.3. Property details

Property: Neds Corner Road Reserve – 11642046, Cascade
Local Government Authority: ESPERANCE, SHIRE OF
DER Region: Goldfields
DPaW District: ESPERANCE
Localities: Cascade

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2.55		Mechanical Removal	Road construction and upgrades

1.5. Decision on application

Decision on Permit Application: Refused
Decision Date: 13 March 2019

Reasons for Decision:

The clearing permit application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986* (EP Act). It has been concluded that the proposed clearing is at variance to clearing principles (d) and (e), may be at variance to principle (a), (b) and (g), and is not likely to be at variance to the remaining principles.

The Delegated Officer determined that the vegetation within the application area comprises of a threatened ecological community (TEC); a significant remnant of native vegetation in an extensively cleared area and may comprise of a high level of biological diversity and significant habitat for conservation significant fauna.

On 31 August 2017, a Delegated Officer of the Department of Water and Environmental Regulation (DWER) wrote to the applicant, outlining the above mentioned environmental impacts and advised that in order to address potential impacts further avoidance and minimisation was required and an offset for the remaining significant residual impacts.

On 4 and 20 October 2017, the applicant provided an offset of 16.208 hectares of native vegetation within Crown Reserve 24633 and 3.776 hectares within Crown Reserve 26912. On 27 November 2017, a spring flora survey was also provided.

On 6 February 2018, a Delegated Officer agreed to the proposed offset and advised that a final decision on the application would be deferred until the applicant is able to provide evidence of approval from the Department of Planning Lands and Heritage (DPLH) for the transfer of Crown Reserve 24633 and 26912 to Department of Biodiversity, Conservation and Attractions (DBCA) for inclusion into conservation estate. The applicant was provided three months to provide this approval.

On the 6 June 2018 and 4 July 2018 a DWER Officer sought an update on the progress of the transfer of land. On the 17 October 2018 the applicant was granted an extension of time to provide evidence of the transfer of lands until 10 January 2019. On the 30 January 2019 a DWER Officer sought an update on the progress of the transfer of land and the applicant requested an additional extension of time.

On 4 February 2019, a Delegated Officer wrote to the applicant providing a final extension of time to provide evidence of the transfer of lands and providing 21 days written notice of the intent to refuse to grant a clearing permit as no evidence of the land transfer had been received. No response from the applicant has been received to date.

In making the decision to refuse to grant the clearing permit, the Delegated Officer had regard to the environmental values of the native vegetation outlined under principles (a), (b), (d), (e) and (g), and planning instruments and other relevant matters outlined in this report. A copy of this assessment will be kept on file should the applicant wish to re-apply once evidence of the transfer of land can be provided.

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	The application area is mapped as Beard vegetation associations 47, 512, 519 and 929 (Shepherd et al., 2001): • 47 is described as Shrublands; tallerack mallee-heath; • 512 is described as Shrublands; mallee scrub, <i>Eucalyptus eremophila</i> and Forrest's marlock (<i>Eucalyptus forrestianna</i>); • 519 is described as Shrublands; mallee scrub, <i>Eucalyptus eremophila</i>; and • 929 is described as Low forest; moort (<i>Eucalyptus platypus</i>).
Clearing Description	The application is to clear 2.55 hectares of native vegetation within a footprint area of 25.824 hectares within Neds Corner Road reserve (PIN 11642046), Cascade, for the purpose of road widening and construction.
Vegetation Condition	Excellent; Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994). To Completely Degraded; No longer intact, completely/almost completely without native species (Keighery, 1994).
Comment	The condition and description of the vegetation within the application area was determined by a site inspection undertaken by former Department of Environment Regulation (DER) (now Department of Water and Environmental Regulation [DWER]) officers on 14 March 2017 (DER, 2017) and a flora survey undertaken by the Shire of Esperance (Shire of Esperance, 2017a).

3. Minimisation and mitigation measures

On 31 August 2017, a Department of Water and Environmental Regulation (DWER) Delegated Officer wrote to the applicant, outlining the impacts of the proposed clearing identified during the assessment of the application, including impacts to a TEC, a highly cleared vegetation association (512) and the potential for threatened and priority flora (DWER ref. A151796). The applicant was invited to provide information addressing the impacts, demonstrating how the impacts would be avoided or minimised, and how any significant residual impacts would be offset.

The applicant has provided the following advice in relation to the avoidance and minimisation of impacts (Shire of Esperance, 2017c):

- reduced the proposed clearing area from 9.6 hectares to 2.55 hectares;
- the proposed clearing is the minimum width required for
- road trains and it's unlikely that the whole footprint of the proposed clearing will be cleared;
- spoon drains will be installed to prevent environmental damage to the surrounding native vegetation; and
- threatened flora identified within the application area will be avoided and a minimum of 50 metre buffer will be provided.

To mitigate impacts to the TEC and highly cleared Beard vegetation association 512, the applicant submitted an offset proposal that involves the acquisition of Crown Reserve 24633 and Crown Reserve C26912 for conservation purposes (Shire of Esperance, 2017d).

4. Assessment of application against clearing principles

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

Proposed clearing may be at variance to this Principle

The footprint area is a 25.824 hectare linear strip along a 10.2 kilometre section of Ned's Corner Road reserve. The road reserve is approximately 125 metres in width, which currently contains an existing road approximately 21 metres wide bordered by vegetation approximately 47 metres in width in the eastern road reserve and 27 metres in width in the western road reserve.

A site inspection conducted by former DER officers identified that the majority of the vegetation within the application area is in a very good to excellent (Keighery, 1994) condition, with some areas that have been cleared for crossovers or access tracks that are in degraded to completely degraded (Keighery, 1994) condition (DER, 2017). The vegetation within the southern end of the application area has been impacted by weeds and is in a degraded to good condition (DER, 2017).

According to available databases, one threatened and 18 priority flora species have been recorded within 20 kilometres of the application area. The closest mapped record is a threatened flora species. Mapped records include priority 1 species, priority 2 and priority 3 species located within (P3) and up to one kilometre (P1 and P2) from the application area. It is noted that flora data points are deliberately inaccurate to protect the location of individuals however it is considered that suitable habitat for priority flora taxa may occur within the application area. The former Department of Parks and Wildlife (Parks and Wildlife) (now Department of Biodiversity, Conservation and Attractions [DBCA]) advised that “the possible presence / absence of the Kwongan TEC, and threatened flora species or other threatened flora species should be determined prior to work commencing” (Parks and Wildlife, 2017).

A level 1 flora survey was conducted in February 2017 by the Shire of Esperance (Shire of Esperance, 2017a). No evidence of recent fire or dieback was observed (Shire of Esperance, 2017a). The survey did not identify any threatened flora or priority flora within the application area. The survey noted that a spring survey to determine the presence of threatened flora at the corner of Neds Corner Road and Mills Road at the southern end of the project area is needed. A spring targeted flora survey of the application area was conducted in November 2017 and identified 7 individuals of this threatened flora species at the corner of Neds Corner Road and Mills Road within the application area (Shire of Esperance, 2017b). The applicant has advised that clearing of threatened flora within the application will not occur and a minimum of a 50 metre buffer will be provided (Shire of Esperance, 2017c). This is further discussed under Principle (c).

The spring survey also identified a priority 4 species, *Eucalyptus stoatei*, occurring throughout the first 1.5 kilometres of the northern end of the application area with thousands of individuals identified. The applicant has advised only branches will be trimmed as part of the proposed roadworks. The impact of the proposed clearing on this species is considered likely to be minimal. A priority 3 species, *Daviesia pauciflora*, was also identified within the application area three kilometres south of Cascade townsite along Neds Corner road. Ten plants were identified within the road reserve and two of these plants are proposed to be cleared (Shire of Esperance, 2017b). Given the limited impact, it is not considered likely for the proposed clearing to significantly impact the conservation status of this species.

As discussed under Principle (d), the DER site inspection identified multiple Proteaceae species within the application area (DER, 2017). The flora survey identified approximately 1.97 hectares of native vegetation within the application area that may be representative of the ‘Proteaceae dominated kwongan shrublands of the southeast coastal floristic province of Western Australia’ threatened ecological community (TEC) (Shire of Esperance, 2017a).

As discussed under Principle (b), the application area is located within the Carnaby’s cockatoo known foraging range and contains Proteaceous species that provide suitable foraging habitat for Carnaby’s cockatoo (*Calyptorhynchus latirostris*; threatened under the *Biodiversity Conservation Act 2016 (BC Act)* (DER, 2017). The vegetation may also comprise of suitable habitat for Quenda.

Mechanical clearing increases the risk of spreading weeds and dieback into native vegetation adjacent to the application area. Weeds can decrease the biodiversity value of an area as they out-compete native vegetation for available resources, contribute to land degradation and increase the frequency and intensity of fires (Department of Environment and Conservation [DEC], 2011). Weed and dieback management practices will assist in mitigating this risk.

As discussed under Principle (e), the local area (10 kilometre radius – 52,234 hectares) has been extensively cleared, with 14,410 hectares (28 per cent) of pre-European vegetation remaining.

Given the application area contains vegetation in very good (Keighery, 1994) to excellent condition, is located within an extensively cleared area, comprises suitable foraging habitat for Carnaby’s cockatoo, habitat for Quenda, presence of a TEC and habitat for conservation significant flora, the vegetation within the application area may comprise a high level of biological diversity.

Given the above, the proposed clearing may be at variance to this Principle.

(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

Proposed clearing may be at variance to this Principle

The vegetation within the application area is comprised of *Banksia* sp., *Hakea* sp., *Melaleuca* sp. and *Caustis* sp. shrubland in excellent to completely degraded (Keighery, 1994) condition (DER, 2017; Shire of Esperance, 2017a).

According to available databases, five conservation significant fauna species, including two priority species and ten species listed as protected under international agreement, have been recorded within a 30 kilometre radius (Parks and Wildlife, 2007-). The application area is likely to provide potential habitat for Carnaby’s cockatoo (*Calyptorhynchus latirostris*) and the Quenda, as the remaining conservation significant fauna species are associated with wetlands. Wetland habitat was not observed within the application area (DER, 2017; Shire of Esperance, 2017a).

Carnaby’s cockatoos forage on the seeds, nuts and flowers of a large variety of plants including Proteaceous species (*Banksia*, *Hakea* and *Grevillea*), as well as *Allocasuarina* and *Eucalyptus* species, *Corymbia calophylla* and a range of introduced species, especially seeds from cones of *Pinus* species (Shah, 2006; Valentine and Stock, 2008). The application area contains suitable foraging habitat for Carnaby’s cockatoo, the majority of which is associated with the Kwongan Shrublands TEC.

Quenda are listed as priority 5 by DBCA. Priority 5 is defined as species that are managed under a specific conservation program, the cessation of which would result in the species becoming threatened. Quenda inhabit scrubby, often swampy vegetation with dense cover up to 1 metre high. The quenda often feeds in areas of pasture and croplands lying close to dense cover (DEC, 2012). Vegetation within the application area may provide habitat for local populations of quenda moving between larger remnants.

The majority of the vegetation within the application area is in very good to excellent (Keighery, 1994) condition, with some areas that have been cleared for crossovers or access tracks that are in degraded to completely degraded (Keighery, 1994) condition (DER, 2017; Shire of Esperance, 2017a). The native vegetation within Ned's Corner Road reserve functions as an ecological linkage to other remnants of native vegetation within the local area. The proposed clearing will not sever this ecological linkage, but will reduce the width of native vegetation within the road reserve. Noting this, the proposed clearing is likely to increase edge effects within adjacent vegetation in the road reserve and contribute to the degradation of the fauna corridor through potential spread of weeds and dieback.

Given the potential impacts to an ecological linkage and suitable foraging habitat for Carnaby's cockatoo and habitat for Quenda, the application area may be necessary for the maintenance of significant fauna habitat, and the proposed clearing may be at variance to this Principle.

Weed and dieback spread may be minimised by the implementation of appropriate hygiene measures during clearing. The risk of increased edge effects within adjacent vegetation is likely to remain despite the implementation of weed and dieback management measures.

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.

Proposed clearing is not likely to be at variance to this Principle

According to available databases, one threatened flora species has been recorded within the local area (10 kilometre radius). The closest record is 360 metres from the application area.

The threatened flora species is a rhizomatous, sedge-like, tufted perennial herb found from east of Ravensthorpe northwards to Ninety Mile Tank, a range of about 120 kilometers. The species grows in flat or gently undulating plains, in yellow or grey sand over laterite or clay. It inhabits low heath and sedge communities with scattered emergent chittick, *Banksia media*, tallerack and other mallees. This species flowers September to October. Although widespread, most populations are small and confined to road reserves alongside cleared farmland (Brown et al., 1998).

Noting the habitat requirements for this species, the application area may comprise of suitable habitat for this species. Parks and Wildlife also advised that "The possible presence / absence of ... this threatened flora species or other threatened flora species should be determined prior to work commencing" (Parks and Wildlife, 2017).

The flora survey undertaken by the Shire of Esperance did not identify any threatened flora or priority flora within the application area. The survey noted that a spring survey to determine the presence of the threatened flora at the corner of Neds Corner Road and Mills Road at the southern end of the project area is needed (Shire of Esperance, 2017a).

A spring targeted flora survey of the application area was conducted in November 2017 and identified 7 individuals of this threatened flora species at the corner of Neds Corner Road and Mills Road within the application area (Shire of Esperance, 2017b). The applicant has advised that clearing of threatened flora within the application will not occur and a minimum of a 50 metre buffer will be provided (Shire of Esperance, 2017c).

Given the above, the proposed clearing is not likely to be at variance to this Principle.

(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.

Proposed clearing is at variance to this Principle

According to available databases, parts of the application area is mapped as the 'Proteaceae dominated kwongkan shrublands of the southeast coastal floristic province of Western Australia' (Kwongkan) TEC, which is listed as endangered under *Environment Protection and Biodiversity Conservation Act 1999* and listed as a Priority 3 ecological community by DBCA.

Parks and Wildlife advised that "The Kwongkan TEC has been approximately mapped by the Department of the Environment and Energy (DotEE), with boundaries of areas considered likely to contain the TEC determined based on layers such as geology and remnant vegetation. The total number of occurrences of the TEC >1ha as mapped by DotEE is 11,360 with a total area of about 1,182,000ha. The TEC extends a distance of about 670km. All mapped occurrences require ground-truthing" (Parks and Wildlife, 2017). Parks and wildlife further advised that "vegetation condition varies from excellent to degraded across the proposed clearing area" (Parks and Wildlife, 2017).

The kwongkan shrublands is predominantly located within the Esperance Sandplains and Mallee bioregions, and typically occurs on sandplains where rainfall ranges from 400 to 800 millimetres a year. According to conservation advice produced by the Threatened Species Scientific Committee (TSSC), this TEC is characterised by a 30 per cent or greater cover of Proteaceae species across all layers where they occur or, in disturbed areas, containing two or more diagnostic Proteaceae species that are likely to form a significant vegetated component when regenerated (TSSC, 2014).

Conservation advice for this TEC defines several characteristics that may indicate a significant impact, including susceptibility to edge effects, the presence of good fauna habitat, threatened species and weeds or dieback, connectivity to other remnants, and whether the community has been heavily impacted in the local area (TSSC, 2014).

The flora survey undertaken by the Shire of Esperance identified that the application area comprises of 1.97 hectares of the Kwongkan TEC. The Shire of Esperance advised that 'whilst the proposal will slightly reduce the extent of the ecological community, it will not significantly impact on other criteria e.g. fragment or increase fragmentation of the ecological community, as the road already passes through it and there is still vegetation remaining in the transport corridor' (Shire of Esperance, 2017a).

The proposed clearing will not cause fragmentation within the road reserve, but will decrease the width of roadside native vegetation. Given that a proportion of vegetation within the road reserve has been subjected to disturbance in the form of weeds and historic clearing, this occurrence of the TEC may be more susceptible to increased edge effects as a result of the proposed clearing. The proposed clearing will further increase the area of the TEC subject to edge effects.

Given the above, the proposed clearing is at variance to this Principle. The proposed clearing may increase the spread of weeds and dieback into occurrences of the TEC, and will increase the susceptibility of the TEC to edge effects.

(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

Proposed clearing is at variance to this Principle

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001).

The application area is located within both the 'Esperance Plains' and 'Mallee' Interim Biogeographic Regionalisation of Australia (IBRA) bioregions. The Esperance Plains and Mallee IBRA bioregions have approximately 52 and 57 per cent of their pre-European vegetation extent remaining, respectively (Government of Western Australia, 2016).

The local area (10 kilometre radius - 52,234 hectares) has been extensively cleared, with 14,410 hectares (28 per cent) of pre-European vegetation remaining.

Mapped Beard vegetation association 512 has approximately 19 per cent of its pre-European extent remaining in the Esperance Plains bioregion and 26 per cent remaining in the Mallee bioregion (Government of Western Australia, 2016). The three other mapped Beard vegetation associations retain more than 30 per cent of their pre-European extent within the two IBRA bioregions (Government of Western Australia, 2018).

The majority of the vegetation within the application area is in a very good to excellent (Keighery, 1994) condition (DER, 2017). The application area comprises the kwongkan shrublands TEC (Shire of Esperance, 2017a), potential impacts to an ecological linkage and may comprise of habitat for conservation significant flora and also provide suitable foraging habitat for Carnaby's cockatoo and Quenda habitat. Given this, the application area is significant as a remnant of native vegetation in an area that has been extensively cleared.

Given the above, the proposed clearing is at variance to this Principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in Parks and Wildlife Managed Lands (%)
IBRA Bioregion*				
Mallee	7,395,897	4,115,655	55	30
Esperance Plains	2,899,950	1,488,029	51	53
Beard Vegetation Association in Esperance Plain Bioregion*				
47	959,936	336,490	35	53
512	204	39	19	n/a
519	73,795	39,195	53	6
929	4,072	3,101	76	5
Beard Vegetation Association in Mallee Bioregion*				
47	66,127	31,536	48	18
512	237,682	62,771	26	9
519	2,100,314	1,248,661	59	18
929	6,663	4,826	72	4

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Proposed clearing is not likely to be at variance to this Principle

There are no watercourses or wetlands mapped within the application area or surrounds. A DER site inspection did not identify the presence of any wetland or watercourse (DER, 2017).

Given the above, the proposed clearing is not likely to be growing in or in association with a watercourse or wetland, and the proposed clearing is not likely to be at variance to this Principle.

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Proposed clearing may be at variance to this Principle

The soil type within the application area is mapped as Xd1, which is described as gently undulating plains or plateaus at low elevation with small granitic hills, some flats, seasonal swamps and talus; and some more strongly undulating land where dissection has begun. Chief soils within this soil type are sandy neutral yellow mottled soils containing variable amounts of ironstone gravel in the surface sand, with leached sands sometimes containing ironstone gravel and underlain by clay substrate at depths of three to five feet (Northcote et al., 1960-68).

The application area has three soil systems mapped by the former Department of Agriculture and Food Western Australia (DAFWA) (now Department of Primary Industries and Regional Development), Esperance System, Scaddan System and Munglinup System.

DAFWA mapping indicates that greater than 70 per cent of the above mentioned soils systems have a high to extreme wind erosion risk (highest risk rating out of six risk categories). DAFWA mapping indicates that 30-50 per cent of the above mentioned soil systems have a moderate to high salinity risk or is presently saline.

The topography of the application area is very flat and the average annual rainfall is 500 millimetres. Groundwater salinity within the application area has been mapped as highly saline at between 14,000-35000 milligrams per litre total dissolved solids. Given the topography of the application area, the porous nature of sandy soils within the application area, the linear shape and size of the application area, and relatively low rainfall, the proposed clearing is unlikely to cause appreciable land degradation through water erosion, waterlogging or salinity.

Given the extensively cleared local area, size of the application area, topography and mapped soil type, the proposed clearing may cause land degradation via wind erosion.

Given the above, the proposed clearing may be at variance to this Principle. Undertaking road construction activities within two months of clearing will mitigate this risk.

(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.

Proposed clearing is not likely to be at variance to this Principle

According to available databases, two conservation areas have been mapped within the local area (10 kilometre radius). Nature Reserve (CR 31745) is located 1.5 kilometres east of the application area and Cascade Nature Reserve is located 2.9 kilometres east of the application area.

Given the distance between the application area and the conservation areas, the proposed clearing is not likely to have an impact on the environmental values of these conservation areas.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

Proposed clearing is not likely to be at variance to this Principle

No wetlands or watercourses have been recorded within or in close proximity to the application area. The proposed clearing will not impact on surface water quality.

Groundwater salinity mapped within the application area is between 14,000-35,000 milligrams per litre total dissolved solids (highly saline). Given the linear shape and size of the application area, it is considered that the proposed clearing is unlikely to lead to a perceptible rise in the water table and thus an increase in groundwater salinity levels.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Proposed clearing is not likely to be at variance to this Principle

DAFWA has mapped the application area as less than three per cent of the Esperance System, Scaddan System and Munglinup System having a moderate to high flood risk, the lowest risk category (Schoknecht et al., 2004). Given the mapped low level of flood risk, mapped soil type and the linear nature of the clearing, with no waterways identified within the application area, it is unlikely that the proposed clearing will cause or exacerbate flooding.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

Planning instruments and other relevant matters.

The application to clear 9.6 hectares of native vegetation within Neds Corner Road Reserve (PIN: 11642046) is for the purpose of road widening and construction. On 7 August 2017, the application area was reduced to clear 2.55 hectares of native vegetation.

The original clearing permit application for 9.6 hectares was advertised in *The West Australian* newspaper on 13 March 2017 and on DER's website on 9 March 2017, for a 21 day public submission period. No submissions were received in relation to this application.

There are no Aboriginal Sites of Significance mapped within the application area. It is the applicant's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

Parks and Wildlife advised that "The Esperance Shire are encouraged to implement 'best practice' for the proposed widening to limit the spread of weeds across the disturbed area. The burden (soil, plant material), is not be pushed into heaps and deposited into the roadside vegetation beyond the application area" (Parks and Wildlife, 2017).

5. Submissions and offset

The assessment against the ten clearing principles has identified that the proposed clearing is at variance to principles (d) and (e). After consideration of the proposed avoidance, minimisation and mitigation measures, it is considered that the proposed clearing will result in the following significant residual impacts:

- loss of up to 1.97 hectares of vegetation in excellent condition containing high biodiversity values (including foraging habitat for Carnaby's cockatoo) and comprising the Kwongan Shrublands TEC; and
- loss of up to 0.5825 hectares of the highly cleared mapped Beard vegetation association 512.

To offset any significant residual impacts, the applicant proposed the following offset:

- Transfer of Crown Reserve 24633 (Coombalbidgup Swamp) to offset the impact to Kwongan shrublands TEC as this reserve contains 28.74 hectares of this TEC in good to excellent condition.
- Transfer of Crown Reserve C26912 (Roberts Swamp) to offset the impact to Beard vegetation association 512 as this Reserve contains approximately 670 hectares of this vegetation association in good to excellent condition.

Crown Reserve 24633 contains approximately 201.67 hectares of native vegetation in excellent condition with 28.74 hectares of which represents the Proteaceae Dominated Kwongan Shrublands of the Southeast Coastal Floristic Province of Western Australia TEC. The reserve also contains 171.54 hectares of wetland vegetation - yate/ paperbark mixed forest. Priority flora *Caesia viscida* (P2) and *Patersonia inaequalis* (P2) have previously been recorded within the Reserve.

Crown Reserve 26912 contains approximately 1,662 hectares of native vegetation, approximately 670 hectares of which represents the highly cleared Beard vegetation association 521. This Reserve also contains approximately 300 hectares of wetland and fringing vegetation which is an important refuge for waterbirds. A population of *Leucopogon rugulosus* (P1) also occurs. Other Beard vegetation associations occurring within the Reserve include 51 and 482. The swamp is considered regionally significant and has previously been highlighted as an important land acquisition for the DBCA within the Esperance and Recherche Parks and Reserves Management Plan 84 (2016).

Crown Reserve 24633 is reserved for the purpose of Parks and Recreation and as a watering hole for travellers and Crown Reserve C26912 is reserved for Parks and Recreation, both of which are managed under management orders given to the Shire of Esperance.

In assessing whether the proposed offset is adequately proportionate to the significance of the environmental values being impacted, DWER undertook a calculation using the Commonwealth *Offsets Assessment Guide* calculator. The calculator indicated that the allocation of 16.208 hectares of Crown Reserve 24633 containing native vegetation consistent with Kwongan Shrublands TEC and 3.776 hectares of Crown Reserve C26912 containing native vegetation consistent with Beard vegetation association 512 is adequate to counterbalance the significant residual impacts of the proposed clearing, consistent with the *WA Environmental Offsets Policy September 2011*. In addition, the proposed offsets are consistent with the *WA Environmental Offsets Guidelines September 2014* by enhancing ecological linkages between conservation areas. The remainder of the area located within the proposed offset sites can be banked for future clearing permit applications.

On 20 October 2017, the applicant forwarded advice from DBCA indicating support for the transfer of Crown Reserves 24633 and C26912 into the conservation estate (Shire of Esperance, 2017e).

Noting the purposes for which Crown Reserves 24633 and C26912 are reserved, authority is required from the Department of Planning, Lands and Heritage in relation to the transfer of the reserves to DBCA for inclusion in the conservation estate.

On 6 February 2018, DWER agreed in principle to the proposed clearing providing that the applicant could provide evidence the land transfers above. On 17 October 2018, an extension of time was granted to provide this evidence. On 6 February 2019, a final extension of time was granted to provide this evidence by 15 February 2019. To date no evidence of approval from DPLH has been received.

6. References

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- Department of Environment Regulation (DER) (2017) Site Inspection Report for CPS 7487/1. Department of Environment Regulation. Western Australia (DER Ref: A1418347).
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GIS Database:

- Aerial imagery
- Remnant vegetation
- SAC bio datasets (accessed July 2017)
- Pre-European Vegetation
- Hydrography, linear
- Soils, statewide
- Groundwater salinity, statewide
- Land Degradation datasets
- DPaW estate
- Aboriginal Sites of Significance