GOVERNMENT OF WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: CPS 10893/1

File Number: DWERVT17431

Duration of Permit: From 1 June 2025 to 1 June 2030

PERMIT HOLDER

Shire of Carnarvon

LAND ON WHICH CLEARING IS TO BE DONE

Lot 535 on Deposited Plan 205438, Carnarvon.

Lot 536 on Deposited Plan 205438, Carnarvon.

Lot 564 on Deposited Plan 205438, Carnarvon.

AUTHORISED ACTIVITY

The permit holder must not clear more than 1.93 hectares of *native vegetation* within the area cross-hatched yellow in Figure 1 of Schedule 1.

CONDITIONS

1. Avoid, minimise, and reduce impacts and extent of clearing

In determining the *native vegetation* authorised to be cleared under this permit, the permit holder must apply the following principles, set out in descending order of preference:

(a) avoid the *clearing* of *native vegetation*;

(b) minimise the amount of *native vegetation* to be cleared; and

(c) reduce the impact of *clearing* on any environmental value.

2. Weed management

When undertaking any *clearing* authorised under this permit, the permit holder must take the following measures to minimise the risk of introduction and spread of *weeds*:

(a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;

(b) ensure that no known *weed*-affected soil, *mulch*, *fill*, or other material is brought into the area to be cleared; and

(c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

3. Directional clearing

The permit holder must

(a) conduct *clearing* activities in a slow, progressive manner towards adjacent remnant *native vegetation*; and

(b) allow reasonable time for fauna present within the area being cleared under this permit to move into adjacent *native vegetation* ahead of the *clearing* activity.

4. Revegetation and rehabilitation (temporary works)

The permit holder must:

(a) retain the vegetative material and topsoil removed by *clearing* authorised under this permit and stockpile the vegetative material and topsoil in an area that has already been cleared;

(b) as soon as is practicable, and no later than six (6) months following *clearing* authorised under this permit, *revegetate* the areas that are no longer required for the authorised purpose for which they were cleared under this permit, by:

(i) re-shaping the surface of the land so that it is consistent with the surrounding five metres of land;

(ii) ripping the ground on the contour to remove soil compaction as necessary; and

(iii) laying the vegetative material and topsoil retained under *condition* 4(a) on the areas that are no longer required for the authorised purpose for which they were cleared under this permit.

5. Watercourse surface flow management

The permit holder must maintain the existing surface water flows where a watercourse is to be impacted by clearing authorised under this permit.

6. Records that must be kept

The permit holder must maintain records relating to the listed relevant matters in accordance with the specifications detailed in Table 1.

Table 1: Records that must be kept

No.	Relevant matter	Specifications
1.	In relation to the authorised *clearing* activities generally	(a) the species composition, structure, and density of the cleared area;

No.	Relevant matter	Specifications
		(b) the location where the *clearing* occurred, recorded using a Global Positioning System (GPS) unit set to GDA2020, expressing the geographical coordinates in Eastings and Northings; (c) the date that the area was cleared; (d) the size of the area cleared (in hectares); (e) actions taken to avoid, minimise, and reduce the impacts and extent of *clearing* in accordance with *condition* 1; (f) actions taken to minimise the risk of the introduction and spread of *weeds* in accordance with *condition* 2; (g) the direction(s) *clearing* was undertaken in accordance with *condition* 3; and (h) actions undertaken in accordance with *condition* 5.
2.	In relation to the *revegetation* of areas pursuant to *condition* 4	(a) actions taken to retain topsoil and vegetative material; (b) the size of the area *revegetated*; (c) the date(s) on which the *revegetation* was undertaken; (d) the *revegetation* activities undertaken; and (e) the boundaries of the area *revegetated*, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 2020 (GDA20). Expressing the geographical coordinates in Eastings and Northing.

7. Reporting

The permit holder must provide to the *CEO* the records required under *condition* 5 when requested by the *CEO*.

DEFINITIONS

In this permit, the terms in Table 2 have the meanings defined.

Table 2: Definitions

Term	Definition
CEO	Chief Executive Officer of the department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*.

Term	Definition
clearing	has the meaning given under section 3(1) of the EP Act.
condition	a condition to which this clearing permit is subject under section 51H of the EP Act.
fill	means material used to increase the ground level, or to fill a depression.
EP Act	*Environmental Protection Act 1986* (WA)
local provenance	means native vegetation seeds and propagating material from natural sources within 50 km and same IBRA subregion of the area cleared.
mulch	means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation.
native vegetation	has the meaning given under section 3(1) and section 51A of the EP Act.
revegetate/ed/ion	means the re-establishment of a cover of *local provenance* native vegetation in an area using methods such as natural regeneration, direct seeding and/or planting, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area
weeds	means any plant – (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or (b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or (c) not indigenous to the area concerned.

END OF CONDITIONS

J Burton

Jessica Burton
A/MANAGER
NATIVE VEGETATION REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

8 May 2025

SCHEDULE 1

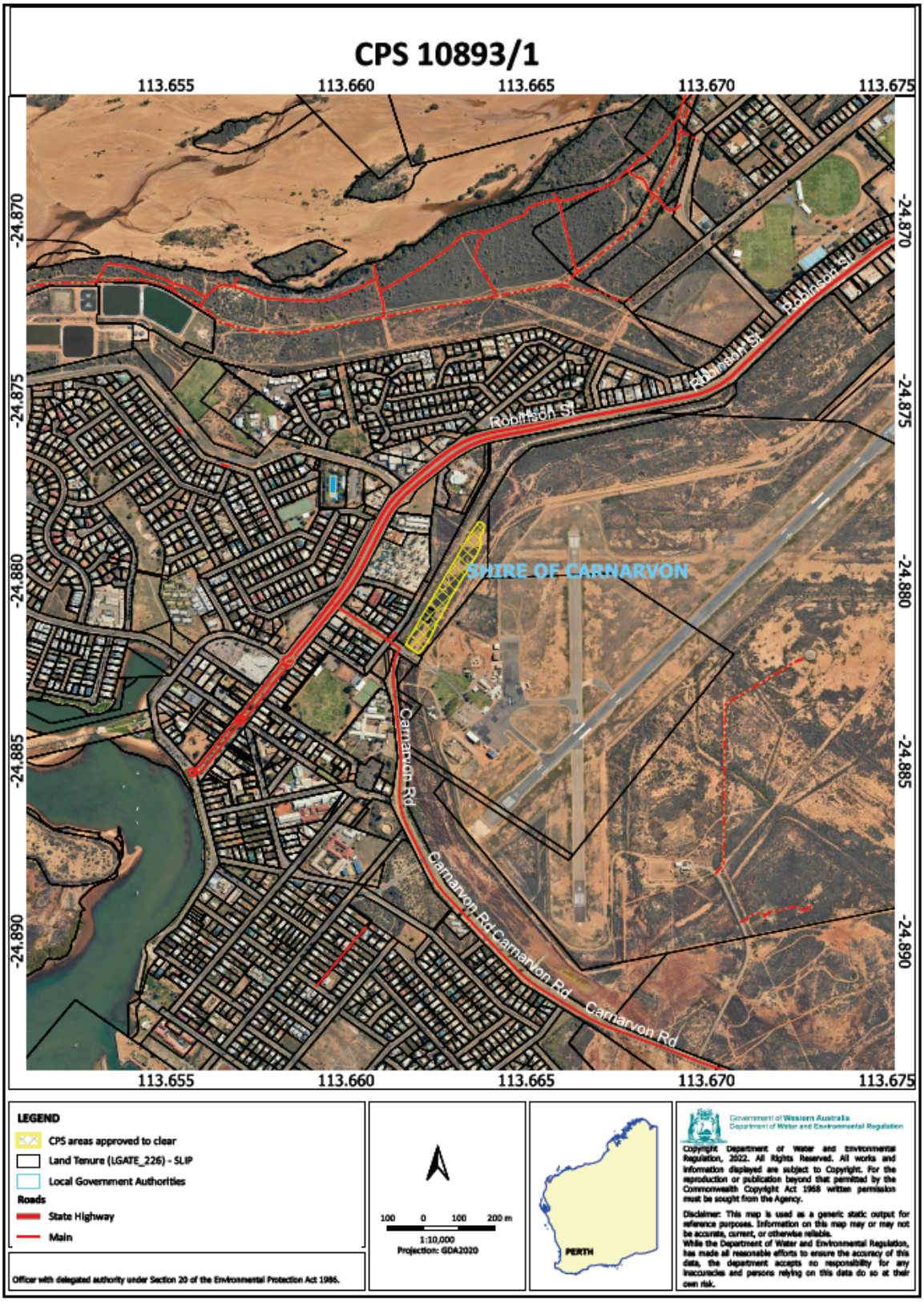

Figure 1: Map of the boundary of the area within which *clearing* may occur is cross-hatched yellow.

Government of Western Australia
Department of Water and Environmental Regulation

Clearing Permit Decision Report

1 Application details and outcome

1.1. Permit application details

Permit number:	CPS 10893/1
Permit type:	Area permit
Applicant name:	Shire of Carnarvon
Application received:	16 December 2024
Application area:	1.93 hectares of native vegetation
Purpose of clearing:	Drainage upgrades
Method of clearing:	Mechanical clearing
Property:	Lots 535, 536 and 564 on Deposited Plan 205438
Location (LGA area/s):	Shire of Carnarvon
Localities (suburb/s):	Carnarvon

1.2. Description of clearing activities

The vegetation proposed to be cleared is contained within a single contiguous area (see Figure 1, Section 1.5).

The purpose of clearing is to fill a dip in a section of the perimeter drain of Carnarvon Airport with sand to achieve an even gradient. This will help to reduce ponding and mosquito breeding after heavy rain (Shire of Carnarvon, 2024). This is a temporary clearing and then the vegetation will be allowed to grow back on cleared area (Shire of Carnarvon, 2024).

1.3. Decision on application

Decision:	Granted
Decision date:	8 May 2025
Decision area:	1.93 hectares of native vegetation, as depicted in Section 1.5, below.

1.4. Reasons for decision

This clearing permit application was submitted, accepted, assessed and determined in accordance with sections 51E and 51O of the *Environmental Protection Act 1986* (EP Act). The Department of Water and Environmental Regulation (DWER) advertised the application for 21 days and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (see Appendix B), relevant datasets (see Appendix F.1), the photographs of vegetation proposed to be cleared (see Appendix E), the clearing principles set out in Schedule 5 of the EP Act (see Appendix C), relevant planning instruments and any other matters considered relevant to the assessment (see Section 3). The Delegated Officer also took into consideration that the proposal is a temporary clearing which will not impact environmental values in the long-term.

The assessment identified that the proposed clearing will result in:

- the loss of native vegetation that is suitable habitat for several migration bird species;

- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values; and
- the potential impacts to vegetation associated with a watercourse.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined the proposed clearing is unlikely to have long-term adverse impacts on habitat for migration bird species. Potential impacts to a watercourse and weed spreading risk can be minimised and managed to unlikely lead to unacceptable to environmental values. The applicant has suitably demonstrated avoidance and minimisation measures.

The Delegated Officer decided to grant a clearing permit subject to conditions to:

- avoid, minimise and reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds;
- maintain the surface water flows; and
- revegetate the area to be cleared (temporary works).

1.5. Site map

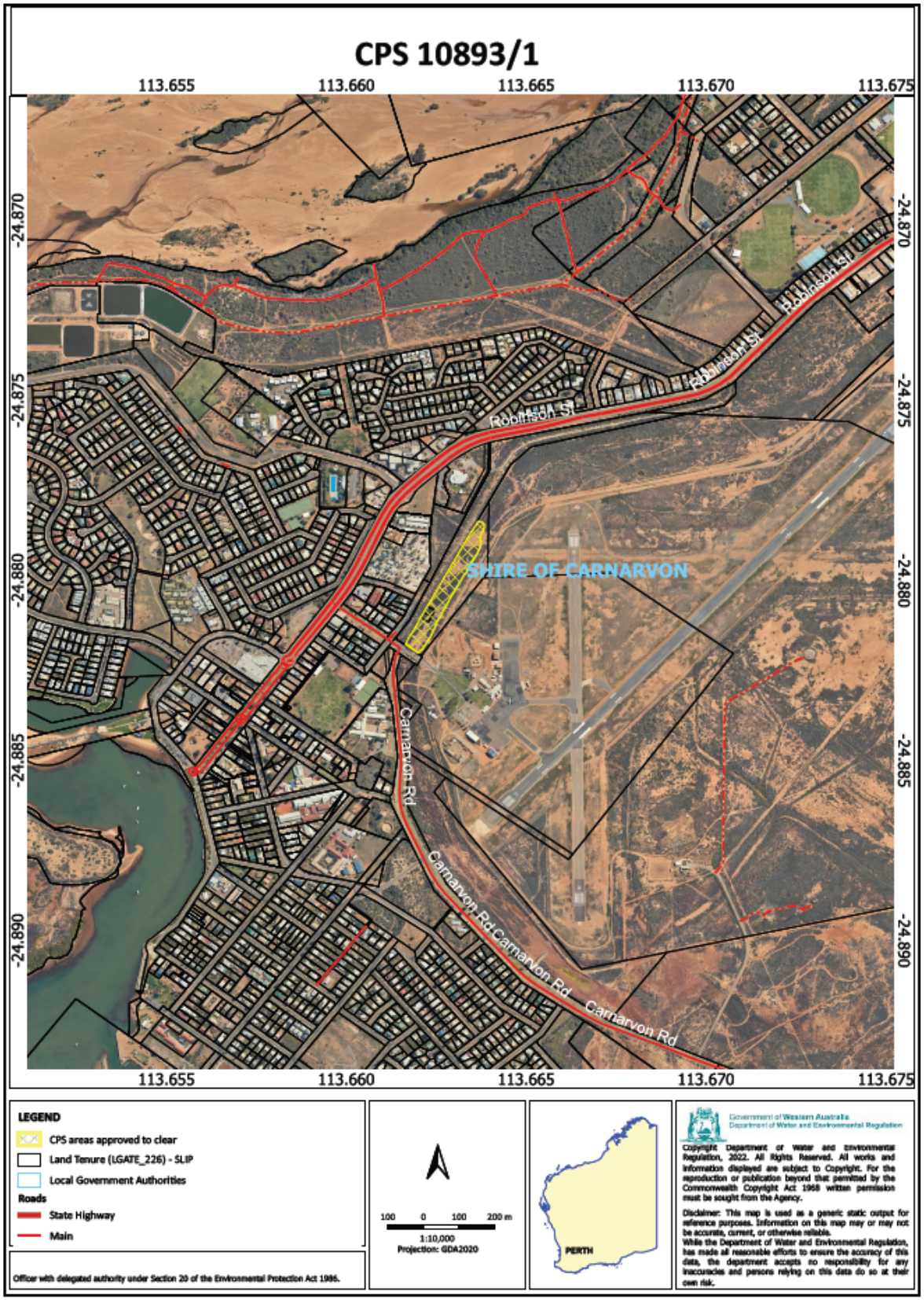

Figure 1 Map of the application area

The area crosshatched yellow indicates the area authorised to be cleared under the granted clearing permit.

2 Legislative context

The clearing of native vegetation in Western Australia is regulated under the EP Act and the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (Clearing Regulations).

In addition to the matters considered in accordance with section 51O of the EP Act (see Section 1.4), the Delegated Officer has also had regard to the objects and principles under section 4A of the EP Act, particularly:

- the precautionary principle
- the principle of intergenerational equity
- the principle of the conservation of biological diversity and ecological integrity.

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *Rights in Water and Irrigation Act 1914* (RIWI Act)

The key guidance documents which inform this assessment are:

- *A guide to the assessment of applications to clear native vegetation* (DER, December 2013)
- *Procedure: Native vegetation clearing permits* (DWER, October 2019)

3 Detailed assessment of application

3.1. Avoidance and mitigation measures

The applicant advised that the proposed clearing is temporary, and vegetation will be allowed to regenerate within the cleared area, post filling (Shire of Carnarvon, 2024). The applicant also informed that they will only be clearing as much as needed to be able to apply more fill to the surface to even out the gradient and to prevent water pooling and mosquito growth (Shire of Carnarvon, 2025a).

The Delegated Officer was satisfied that the applicant has made a reasonable effort to avoid and minimise potential impacts of the proposed clearing on environmental values. The applicant's commitment to revegetate the area to be cleared has been enforced as a condition of the granted permit.

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix B) and the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values.

The assessment against the clearing principles (see **Error! Reference source not found.**) identified that the impacts of the proposed clearing present a risk to biological value of fauna and water resources. The consideration of these impacts, and the extent to which they can be managed through conditions applied in line with sections 51H and 51I of the EP Act, is set out below.

3.2.1. Biological value (fauna) - Clearing Principles (b)

Assessment

The desktop assessment identified 64 conservation significant fauna species recorded in the 50-kilometre radius of the application area (local area), including 56 bird species, four mammal species, three reptile species, and one invertebrate species. In determining the likelihood of conservation significant fauna occurring within the application area, consideration was given to the results of the preferred habitat types, proximity of records to the application area, and the type and condition of the vegetation within the application area. Based on these analysis factors, 46 migratory bird species are considered to potentially occur in the application area.

Most of identified bird species inhabit coastal environments and water associated habitat. The drainage line and shrubland habitat within the application area are likely to provide suitable habitat for birds after rainfall events. However, noting that the application area is only 1.5 kilometres from Shark Bay East wetland which is categorised within the Directory of Important Wetlands in Australia, the non-perennial drainage within the area proposed to be cleared is not considered a significant habitat for these bird species. Furthermore, noting that the final land use of the application area will be kept unchanged as a drainage area, the impacts on these bird species' habitat (if any) are in short-term and negligible.

The proposed clearing may introduce or spread weeds into adjacent native vegetation and impact the habitat values of remnant vegetation.

Conclusion

Based on the above assessment, the proposed clearing is unlikely to impact significant habitat for any conservation listed fauna species. However, it may impact the habitat values of adjacent vegetation by introducing or spreading weeds.

Conditions
To address the above impacts, the following management measures will be required as conditions on the clearing permit:

- Avoid and minimise clearing, to minimise the direct impacts to native vegetation.
- Take hygiene steps to minimise the risk of the introduction and spread of weeds and dieback.

3.2.2. Water courses - Clearing Principles (f) and (j)

Assessment

There is a minor non-perennial river branch mapped along the application area. This forms a natural drainage on the perimeter of Carnarvon Airport. This water course connects to a perennial major river in the Shark Bay East wetland, approximately 1.5 kilometres to the south of the application area.

The proposed clearing may impact the water flow, in the short term, during the clearing process. The final land use of the area proposed to be cleared is still for drainage, therefore, the proposed clearing is unlikely to impact the hydrology of the area, long term. DWER's Mid West Gascoyne Region team also advised that the proposed clearing is unlikely to impact water quality (DWER, 2025).

Noting that the application area falls within the Gascoyne River and Tributaries Surface Water Area and Gascoyne Groundwater Area, as proclaimed under the RIWI Act, a permit to interfere with bed and banks under Section 17 of the RIWI Act is required for the proposed clearing (DWER, 2025). The applicant has obtained the permit to interfere with bed and banks for the proposed works (Shire of Carnarvon, 2025b).

Conclusion

Based on the above assessment, the proposed clearing is unlikely to impact the hydrology long term as well as water quality of the water course within the application area. However, the proposed clearing may have short term impacts to the water flows of the watercourse within the application area.

Conditions
To address the impacts to the water flows in short term, the following management measure will be required as condition on the clearing permit:

- Maintain the existing surface water flows.

3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on DWER's website on 10 February 2025, inviting submissions from the public within a 21-day period. No submissions were received.

Several Aboriginal sites of significance have been mapped within the application area. It is the permit holder's responsibility to comply with the *Aboriginal Heritage Act 1972* (WA) and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

End

Appendix A. Additional information provided by applicant

Summary of information provided	Consideration of information provided
Permit to interfere bed and banks for proposed works	This information has been reviewed and presented in Section 3.2.3 of this report.

Appendix B. Site characteristics

B.1. Site characteristics

The information provided below describes the key characteristics of the area proposed to be cleared and is based on the best information available to DWER at the time of this assessment. This information was used to inform the assessment of the clearing against the Clearing Principles, contained in Appendix C.

Characteristic	Details
Local context	The area proposed to be cleared is part of an expansive tract of native vegetation in the extensive land use zone of Western Australia. The vegetation proposed to be cleared is located within the perimeter drain of Carnarvon Airport, surrounding by remnant vegetation. Aerial imagery indicates the local area (50-kilometre radius from the centre of the area proposed to be cleared, excluding the ocean) retains approximately more than 99 per cent of the original native vegetation cover.
Ecological linkage	The application area is not mapped or appears to be within any formal/informal ecological linkages.
Conservation areas	The application area is not mapped within any conservation areas. No conservation areas are mapped within the local area.
Vegetation description	Photographs supplied by the applicant indicate the vegetation within the proposed clearing area consists of halophytic shrubland species (Shire of Carnarvon, 2025a). Representative photos are available in Appendix E. This is consistent with the mapped vegetation type: Gascoyne Marshes _308, which is described as *Atriplex* spp. *Maireana* spp. communities on alkaline soils (Shepherd et al., 2001). The mapped vegetation type retains approximately 99.2 per cent of the original extent (Government of Western Australia, 2019).
Vegetation condition	Photographs supplied by the applicant indicate that the vegetation within the proposed clearing area is in Completely Degraded to Very Good (Trudgen, 1991) condition. The full Trudgen (1991) condition rating scale is provided in Appendix D. Representative photos are available in Appendix E.
Climate	Climate: Mean maximum temperature is 27.4 degrees Celsius. Mean minimum temperature is 17.2 degrees Celsius. Rainfall: Mean annual rainfall is 220.9 millimetres. (At Carnarvon Airport station - BOM, 2025)
Soil and landform description	The soil is mapped as delta urban phase (235DeX_URBAN), which is categorized as disturbed land, not cropping soil. The land type is described as alluvial plains with halophytic shrubland (DPIRD, 2022).
Land degradation risk	The soil is described as low land degradation risks due to acidification and salinity (DPIRD, 2022).
Waterbodies	The desktop assessment and aerial imagery indicated that a minor nonperennial river runs along the application area, creating a natural perimeter drain around Carnarvon Airport. This drain connects to Shark Bay East, a wetland categorized within the

Characteristic	Details
	Directory of Important Wetlands in Australia, which is located approximately 1.5 kilometres south of the application area.
Hydrogeography	The application area falls within the Gascoyne River and Tributaries Surface Water Area and Gascoyne Groundwater Area, as proclaimed under the RiWI Act. Groundwater salinity within the application area is mapped as from 500 to 1000 milligrams per litre total dissolved solids.
Flora	The desktop assessment identified only four priority flora taxa within the local area. None of them are mapped within the same soil type of the application area. The closest flora record is of *Abutilon* sp. *Pritzelianum* which is located approximately 10.2 kilometres from the application area.
Ecological communities	No threatened and priority ecological communities are mapped within the application area. There is only one type of significant conservation ecological community mapped within the local area which is the Priority 3 community Lyell Land System. The closest record of this ecological community is mapped approximately 22 kilometres to the north of the application area.
Fauna	The desktop assessment identified 64 conservation specific fauna species within the local area (excluding the ocean) which comprises of 16 threatened species, two priority species, and 46 specially protected species. The closest records are equally of *Calidris canutus* (red knot), *Calidris tenuirostris* (great knot), *Charadrius leschenaultii* (greater sand plover), *Charadrius mongolus* (lesser sand plover) and *Numenius madagascariensis* (eastern curlew) recorded approximately 100 metres from the application area.

Appendix C. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
Principle (a): *"Native vegetation should not be cleared if it comprises a high level of biodiversity."* Assessment: The area proposed to be cleared is mapped as disturbed land with vegetation consisting of halophytic shrubland. It does not contain significant habitat for significant conservation flora and fauna.	Not likely to be at variance	No
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."* Assessment: The desktop assessment identified several marine or wetland dependant conservation significant fauna species that require specific habitats for wading within the local area. The proposed clearing area contains a drainage line which can be a suitable habitat for these species after rainfall. However, this habitat is unlikely to be significant, noting the non-perennial nature of the drainage line within the application area and the existence of better-quality habitat in proximity to the application area.	Not likely to be at variance	Yes *Refer to Section 3.2.1, above.*
Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."* Assessment: The area proposed to be cleared is unlikely to contain habitat for threatened flora species.	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
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."* Assessment: The area proposed to be cleared does not contains species that can indicate a threatened ecological community.	Not likely to be at variance	No
Environmental value: significant remnant vegetation and conservation areas		
Principle (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."* Assessment: The extent of the mapped vegetation type or native vegetation in the local area is consistent with the national objectives and targets for biodiversity conservation in Australia. The vegetation proposed to be cleared is not considered to be part of a significant ecological linkage in the local area.	Not at variance	No
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."* Assessment: Given no conservation areas are mapped within 50-kilometre radius from the application area, the proposed clearing is not likely to have an impact on the environmental values of conservation areas.	Not at variance	No
Environmental value: land and water resources		
Principle (f): *"Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."* Assessment: Given a minor nonperennial river runs along the application area, the proposed clearing will impact an environment associated with a watercourse.	At variance	Yes *Refer to Section 3.2.2, above.*
Principle (g): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."* Assessment: The mapped soils are not susceptible to acidification and salinity. Noting the extent of the application area and that the clearing is only temporary, the proposed clearing is not likely to have an appreciable impact on land degradation.	Not likely to be at variance	No
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."* Assessment: Even though a minor nonperennial river runs along the application area, noting the temporary nature of the proposed clearing and the nonperennial nature of the water course, the proposed clearing is unlikely to significantly impact surface or ground water quality.	Not likely to be at variance	Yes *Refer to Section 3.2.2, above.*

Assessment against the clearing principles	Variance level	Is further consideration required?
Principle (j): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."* Assessment: The mapped soils and topographic contours in the surrounding area do not indicate the proposed clearing is likely to contribute to increased incidence or intensity of flooding. Noting that the purpose of the proposed clearing is to fill a dip with sand to avoid ponding, the proposed clearing is not only unlikely to contribute to waterlogging but also to eliminate the waterlogging currently happened within the application area.	Not likely to be at variance	No

Appendix D. Vegetation condition rating scale

Vegetation condition is a rating given to a defined area of vegetation to categorise and rank disturbance related to human activities. The rating refers to the degree of change in the vegetation structure, density and species present in relation to undisturbed vegetation of the same type. The degree of disturbance impacts upon the vegetation's ability to regenerate. Disturbance at a site can be a cumulative effect from a number of interacting disturbance types.

Considering its location, the scale below was used to measure the condition of the vegetation proposed to be cleared. This scale has been extracted from Trudgen, M.E. (1991) *Vegetation condition scale* in National Trust (WA) 1993 Urban Bushland Policy. National Trust of Australia (WA), Wildflower Society of WA (Inc.), and the Tree Society (Inc.), Perth.

Measuring vegetation condition for the Eremaean and Northern Botanical Provinces (Trudgen, 1991)

Condition	Description
Excellent	Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.
Very good	Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated fire, the presence of some relatively non-aggressive weeds, or occasional vehicle tracks.
Good	More obvious signs of damage caused by human activity since European settlement, including some obvious impact on the vegetation structure such as that caused by low levels of grazing or slightly aggressive weeds.
Poor	Still retains basic vegetation structure or ability to regenerate it after very obvious impacts of human activities since European settlement, such as grazing, partial clearing, frequent fires or aggressive weeds.
Very poor	Severely impacted by grazing, very frequent fires, clearing or a combination of these activities. Scope for some regeneration but not to a state approaching good condition without intensive management. Usually with a number of weed species present including very aggressive species.
Completely degraded	Areas that are completely or almost completely without native species in the structure of their vegetation; i.e. areas that are cleared or 'parkland cleared' with their flora comprising weed or crop species with isolated native trees or shrubs.

Appendix E. Photographs of the vegetation

Photographs of vegetation proposed to be cleared (Shire of Carnarvon, 2025a)

Figure 1. Red line indicates approximate border of drain where clearing will only be within the drain

Appendix F. Sources of information

F.1. GIS databases

Publicly available GIS Databases used (sourced from www.data.wa.gov.au):

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- DBCA – Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Directory of Important Wetlands in Australia – Western Australia (DBCA-045)
- Environmentally Sensitive Areas (DWER-046)
- Flood Risk (DPIRD-007)
- Groundwater Salinity Statewide (DWER-026)
- Hydrography – Inland Waters – Waterlines
- Hydrological Zones of Western Australia (DPIRD-069)
- IBRA Vegetation Statistics
- Imagery
- Pre-European Vegetation Statistics
- Public Drinking Water Source Areas (DWER-033)
- Remnant Vegetation, All Areas
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Land Quality – Flood Risk (DPIRD-007)
- Soil Landscape Land Quality – Phosphorus Export Risk (DPIRD-010)
- Soil Landscape Land Quality – Subsurface Acidification Risk (DPIRD-011)
- Soil Landscape Land Quality – Water Erosion Risk (DPIRD-013)
- Soil Landscape Land Quality – Water Repellence Risk (DPIRD-014)
- Soil Landscape Land Quality – Waterlogging Risk (DPIRD-015)
- Soil Landscape Land Quality – Wind Erosion Risk (DPIRD-016)
- Soil Landscape Mapping – Best Available

Restricted GIS Databases used:

- ICMS (Incident Complaints Management System) – Points and Polygons
- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities

F.2. References

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Commonwealth of Australia (2001) *National Objectives and Targets for Biodiversity Conservation 2001-2005*, Canberra.

Department of Environment Regulation (DER) (2013). *A guide to the assessment of applications to clear native vegetation*. Perth. Available from: https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf.

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Government of Western Australia. (2019) *2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019.* WA Department of Biodiversity, Conservation and Attractions. https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics

Department of Water and Environmental Regulation (DWER) (Water Regulation - Mid West Gascoyne Region team) (2025) *Rights in Water and Irrigation Act 1914 advice for clearing permit application CPS 10893/1*, received 11 March 2025 (DWER Ref: DWERDT1088476).

Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) *Native Vegetation in Western Australia, Extent, Type and Status*. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

Shire of Carnarvon (2024) *Clearing permit application CPS 10893/1*, received 16 December 2024 (DWER Ref: DWERDT1052515).

Shire of Carnarvon (2025a) *Supporting information (photos of vegetation) for the clearing permit application CPS 10893/1*, received 14 January 2025 (DWER Ref: DWERDT1061528).

Shire of Carnarvon (2025b) *Providing the permit to interfere with bed and banks for the proposed works under the clearing permit application CPS 10893/1*, received 05 May 2025 (DWER Ref: DWERDT1114906).

Trudgen, M.E. (1991) *Vegetation condition scale* in National Trust (WA) 1993 Urban Bushland Policy. National Trust of Australia (WA), Wildflower Society of WA (Inc.), and the Tree Society (Inc.), Perth.