GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: CPS 11291/1

File Number: DWERDT1271791

Duration of Permit: From 15 May 2026 to 15 May 2034

PERMIT HOLDER

City of Canning

LAND ON WHICH CLEARING IS TO BE DONE

Lot 29 on Diagram 39644, Queens Park

Lot 262 On Plan 1904, Queens Park

AUTHORISED ACTIVITY

(a) The permit holder must not clear more than 0.99 hectares of *native vegetation* within the area cross-hatched yellow in Figure 1 of Schedule 1.

(b) The permit holder is authorised to clear *native vegetation* for the purpose of managing and controlling the spread of *Typha* species within the wetland reserve and undertaking basin enhancement works.

CONDITIONS

1. Period during which clearing is authorised

The permit holder must not clear any *native vegetation* after 15 May 2028.

2. 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.

3. Weed and dieback 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* and *dieback*:

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

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

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

4. Weed management - chemical

Undertake spraying of chemical solution during the driest period of the year when the water level is at its lowest and during calm conditions.

5. Clearing not authorised (tree diameter)

The permit holder must clear not more than two (2) native trees within the area cross-hatched yellow in Figure 1 of Schedule 1 that have a diameter, measured at 130 centimeters from the base of the tree, of 15 centimeters or greater.

6. Fauna management

(a) Prior to undertaking any *clearing* authorised under this permit, the permit holder must inspect the area cross-hatched yellow in Figure 1 of Schedule 1 prior to works commencing and for the duration of *clearing* to identify the presence of any native fauna.

(b) Clearing activities must cease in any area where native fauna are identified under condition 6(a), until either:

(i) the individual(s) have, after being encouraged to disperse by the permit holder, moved into adjacent habitat ahead of the clearing activity; or

(ii) the individual(s) have been removed and relocated by the permit holder to *suitable habitat*.

7. Directional clearing

The permit holder must:

(a) conduct *clearing* authorised under this permit in one direction towards adjacent *native vegetation*; and

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

8. Revegetation and rehabilitation

(a) Within 12 months of undertaking *clearing* authorised under this permit, and no later than 15 May 2029, within the area cross-hatched yellow in Figure 1 of Schedule 1, the permit holder must implement and adhere to the 'P1149 Queen's Park Reserve Sump Revegetation Management Plan' prepared by Tranen Pty Ltd (2025), including but not limited to the following actions:

(i) commence *revegetation* and *rehabilitation* of cleared areas by:

(i) *planting* and/or *direct seeding native vegetation*, ensuring only *local provenance* seeds and propagating material are used to *revegetate* and *rehabilitate*;

(ii) ensuring *planting* is undertaken at the *optimal time*; and

(iii) undertaking *weed* control for at least two years post *planting*, if required.

(b) Within 24 months of undertaking *revegetation* and *rehabilitation* in accordance with *condition* 8(a) of this permit, the permit holder must:

(i) engage an *environmental specialist* to determine the species composition, structure and density of the area *revegetated* and *rehabilitated*;

(ii) where, in the opinion of the *environmental specialist*, the composition, structure and density of the area *revegetated* and *rehabilitated* determined under *condition* 8(b)(i) will not result in a similar species composition, structure and density to that of the *Cannington complex*, the permit holder must undertake additional *planting* and/or *direct seeding* of *native vegetation* that will result in a similar species composition, structure and density to that of the *Cannington complex* persisting within the area *revegetated* and *rehabilitated*; and

(iii) where additional *planting* or *direct seeding* of *native vegetation* is undertaken in accordance with *condition* 8(b)(ii), the permit holder must repeat the activities required by *condition*s 8(a) and 8(b)(i-ii) of this permit.

9. 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; (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;

No.	Relevant matter	Specifications
		(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* 2; (f) actions taken to minimise the risk of the introduction and spread of *weeds* and *dieback* in accordance with *condition* 3; and (g) actions taken to manage chemical use in accordance with *condition* 4.
2.	In relation to tree retention pursuant to *condition* 5	(a) the location of each native tree cleared in accordance with *condition* 5, recorded using a Global Positioning System (GPS) unit set to GDA2020, expressing the geographical coordinates in Eastings and Northings.
3.	In relation to fauna management pursuant to *condition* 6 and 7	(a) actions taken to avoid impacts to fauna in accordance with *condition* 6; and (b) fauna management actions undertaken in accordance with *condition* 7.
4.	In relation to *revegetation* pursuant to *condition* 8	(a) the date(s) in which the *revegetation* and *rehabilitation* was undertaken; (b) the boundaries of the *revegetated* and *rehabilitated* area recorded using a Global Positioning System (GPS) unit set to GDA2020, expressing the geographical coordinates in Eastings and Northings; (c) a description of the *revegetation* and *rehabilitation* activities undertaken pursuant to *condition* 8(a), including *planted* species composition and density, and actions taken to implement *weed* control; (d) a copy of the *environmental specialist's* monitoring report and determination; and (e) a description of any *remedial actions* undertaken pursuant to *conditions* 8(b)(ii)-(iii) where monitoring indicates that the *planted native vegetation* will not survive.

10. Reporting

The permit holder must provide to the *CEO* the records required under *condition* 9 of this permit when requested by the *CEO*.

DEFINITIONS

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

Table 2: Definitions

Term	Definition
Cannington complex	is described as a mosaic of vegetation from adjacent vegetation complexes of Bassendean, Karrakatta, Southern River and Vasse.
CEO	Chief Executive Officer of the department responsible for the administration of the *clearing* provisions under the *Environmental Protection Act 1986*.
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.
dieback	means the effect of *Phytophthora* species on *native vegetation*.
direct seeding	means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species.
environmental specialist	means a person who holds a tertiary qualification in environmental science or equivalent, and has a minimum of 2 years work experience relevant to the type of environmental advice that an environmental specialist is required to provide under this permit, or who is approved by the *CEO* as a suitable environmental specialist.
EP Act	*Environmental Protection Act 1986* (WA)
fill	means material used to increase the ground level, or to fill a depression.
local provenance	means *native vegetation* seeds and propagating material from natural sources within 50 kilometres and the 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.
optimum time	means the period from May to June for undertaking planting or seeding
planting/s/ed	means the re-establishment of vegetation by creating favourable soil *condition*s and planting seedlings of the desired species
rehabilitate/ed/ing/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.
remedial actions	means for the purpose of this permit, any activity that is required to ensure successful re-establishment and survival of planted native riparian vegetation.
revegetate/ed/ing/ion	means actively managing an area containing *native vegetation* in order to improve the ecological function of the area.
suitable habitat	means habitat known to support the native fauna species requiring relocation, within the known current distribution of the species.
weeds	means any plant –

Term	Definition
	(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.

REFERENCES

Tranen Pty Ltd (2025) *P1149 Queen's Park Reserve Sump Revegetation Management Plan*. Prepared in August 2025 for City of Canning. Received by the department on 27 February 2026 (DWER Ref DWERDT1304971). Available at https://ftp.dwer.wa.gov.au/permit/11291/.

END OF CONDITIONS

Josephine Heffernan 2026.04.22 11:31:58 +08'00'

Josephine Heffernan
Senior Environmental Officer
NATIVE VEGETATION REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

22 April 2026

SCHEDULE 1

The boundary of the area authorised to be cleared is shown in the map below (Figure 1).

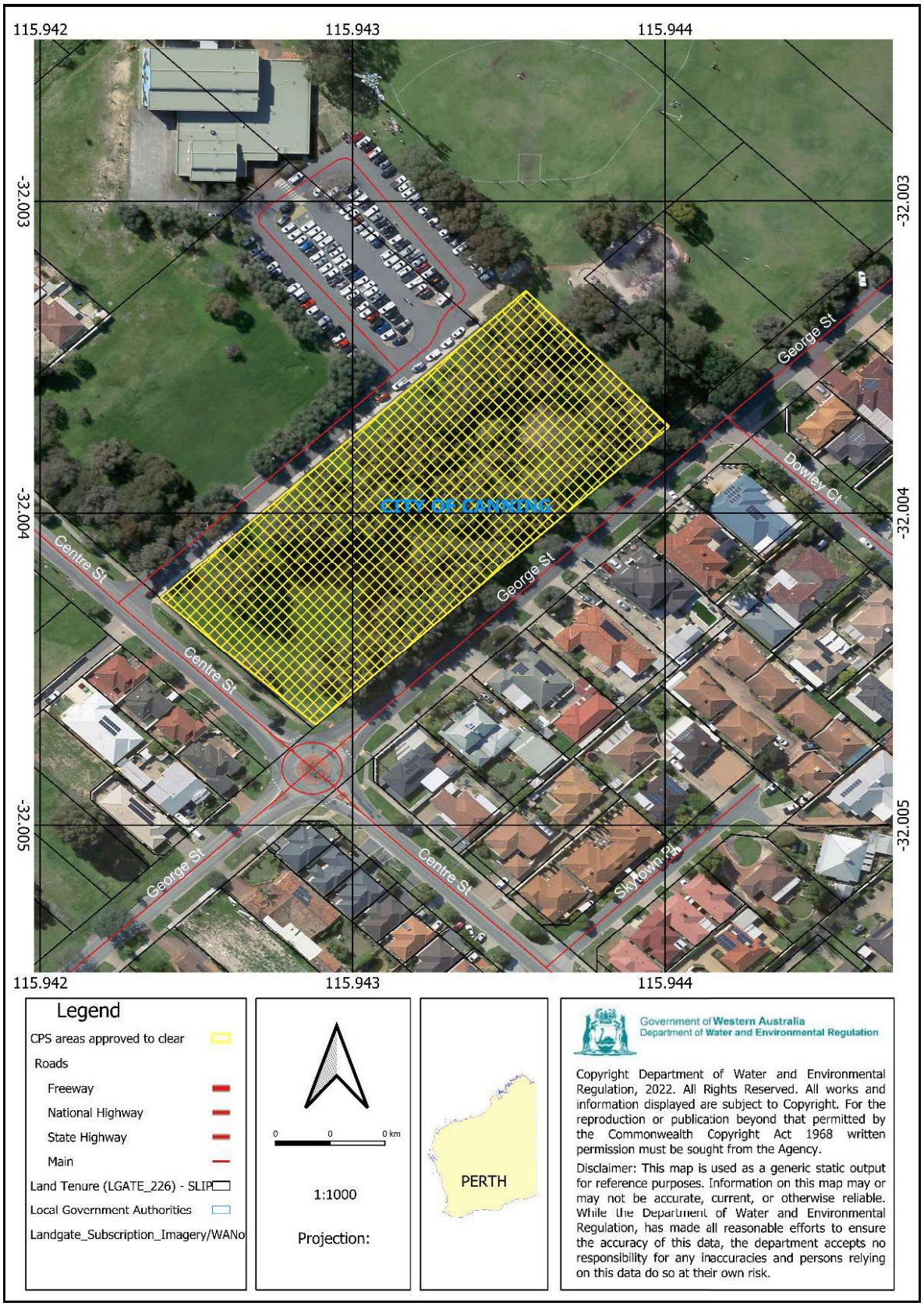

Figure 1: Map of the boundary of the area within which *clearing* may occur (cross-hatched yellow)

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 11291/1
Permit type:	Area permit
Applicant name:	City of Canning
Application received:	9 October 2025
Application area:	0.99-hectares of native vegetation
Purpose of clearing:	Removing *Typha orientalis* and undertaking basin enhancement works
Method of clearing:	Mulching / slashing / chemical
Property:	Lot 29 on Diagram 39644 Lot 262 on Plan 1904
Location (LGA area/s):	City of Canning
Localities (suburb/s):	Queens Park

1.2. Description of clearing activities

The City of Canning (the City) proposes to clear up to 0.99 hectares of native vegetation at Queens Park within Lot 29 on Diagram 39644 and Lot 262 on Plan 1904. As part of a Federal Government grant, the City is undertaking basin enhancement works within the Queens Park Basin.

The proposed works involve removal of *Typha orientalis* and excavation within the basin to improve drainage infrastructure and facilitate revegetation. *Melaleuca rhaphiophylla* occurs within the application area and will be retained, except for one dead individual confirmed for removal (see Section 3.1). The application area is shown in Figure 1, Section 1.5.

1.3. Decision on application

Decision:	Granted
Decision date:	22 April 2026
Decision area:	0.99-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 A), relevant datasets (see Appendix H.1), the clearing principles set out in Schedule 5 of the EP Act (see Appendix B), relevant planning instruments and any other matters considered relevant to the assessment (see Section 3.3). The Delegated Officer also took into consideration the purpose of the clearing is to remove *Typha orientalis*, minimise disruption to wetland ecology, and maintain biodiversity, drainage and water flow.

The assessment identified that the proposed clearing may result in:

- the loss of native vegetation that provides potential fauna habitat,
- 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 for increased sedimentation and turbidity within the application area, however impacts are likely to be minor and short-term.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined that the above impacts can be appropriately managed through conditions on the clearing permit.

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

- undertake avoid and minimise measures to reduce the impacts and extent of clearing,
- take hygiene steps to minimise the risk of the introduction and spread of weeds and dieback,
- undertake spraying of chemical solutions during the driest time of the year when the water level is at its lowest and during calm conditions, to limit unintended impacts to flora and fauna,
- not clear more than two mature native trees to reduce the impact of clearing,
- pre-clearing site inspections prior to works commencing and ongoing during works for any fauna that may be present. If found and are not able to move into adjacent habitat, the City must cease works until the identified fauna has been relocated,
- undertake slow, progressive one directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity, and
- revegetate and rehabilitate cleared areas to improve habitat value and stabilise the wetland.

1.5. Site maps

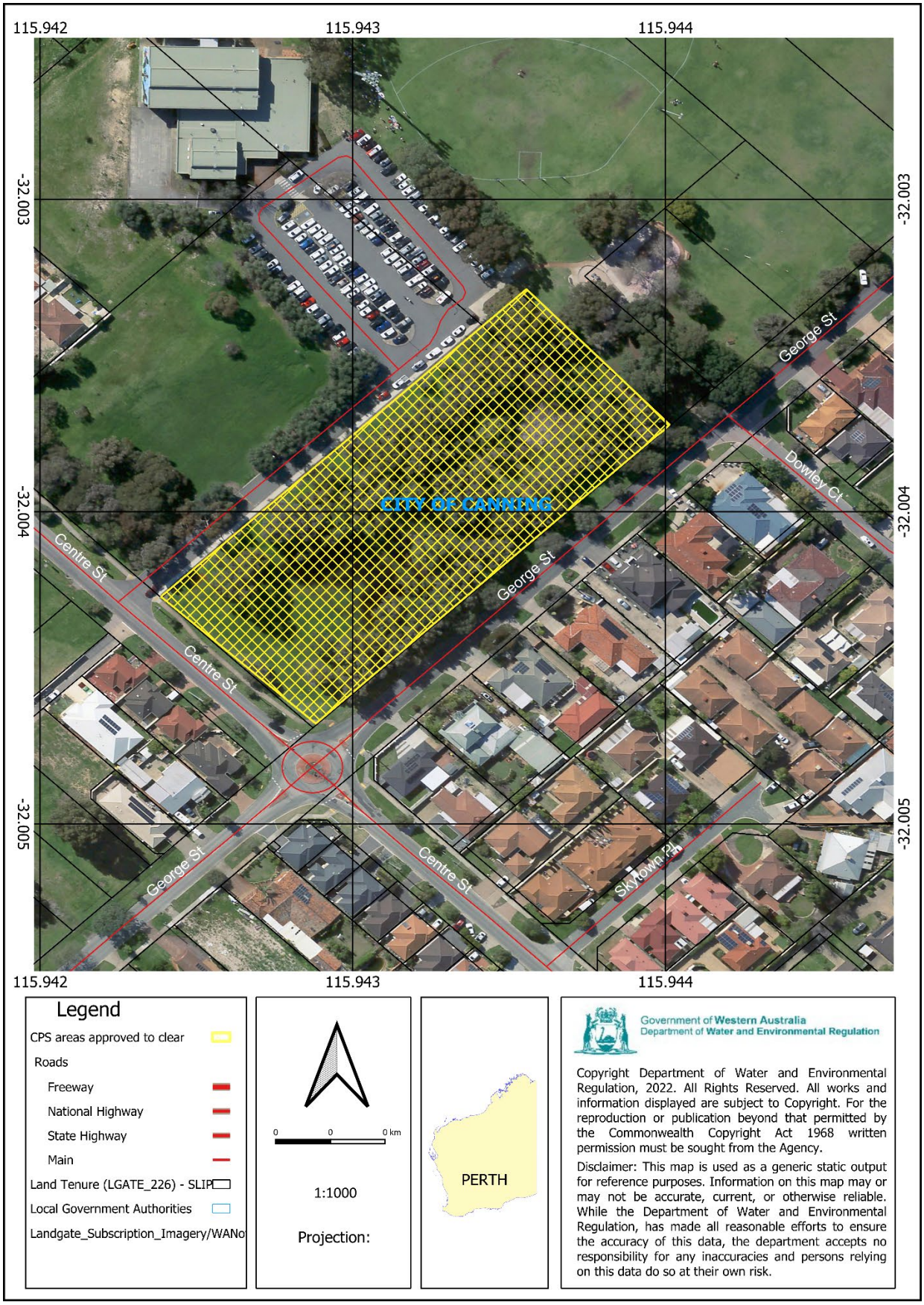

Figure 1: Map of the application area. The area crosshatched yellow indicates the area authorised to be cleared under the granted clearing permit.

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)

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

Evidence was submitted by the applicant demonstrating the avoidance and mitigation measures proposed for the works:

- The City proposes to clear *Typha orientalis* only where unavoidable during construction, while retaining *Melaleuca rhaphiophylla*, except for one dead individual confirmed for removal. Any *Melaleuca rhaphiophylla* trees damaged or lost as a result of the works will be replaced.
- The basin has been designed around retaining the existing stand of *Melaleuca rhaphiophylla*. Construction tender documents will include the establishment of a tree protection zone to ensure retained trees are protected during construction.
- To mitigate habitat loss, the City will revegetate the constructed basin to restore habitat values.
- Following revegetation, the City will continue weed control and ongoing management of re-emerging *Typha orientalis* to support the successful establishment of native species.

The Delegated Officer was satisfied that the applicant has made reasonable efforts to avoid and minimise potential impacts of the proposed clearing on environmental values.

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix A) 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 Appendix B) identified that the impacts of the proposed clearing present a risk to biological values (fauna, flora), remnant vegetation 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 values (fauna) - Clearing Principles (a) and (b)

Assessment

A fauna likelihood assessment was conducted based on:

- the preferred habitat and vegetation types of conservation significant fauna species recorded in the local area (10-kilometre radius from the application area),
- the site characteristics (see Appendix A.1), and
- known species distribution.

The likelihood analysis identified three conservation significant fauna species which may occur in the application area: *Hydromys chrysogaster* (rakali), *Isoodon fusciventer* (quenda), and *Oxyura australis* (blue-billed duck). *Westralunio carteri* (Carter's freshwater mussel) has been recorded in waterways near the application area.

Rakali (P4)

Rakali are amphibious mammals that forage primarily in aquatic environments and occupy terrestrial burrows along the banks of waterways (DWER, 2026). Rakali require areas of intact riparian vegetation with associated bank stability (DWER, 2026). Noting the condition of the vegetation in the application area, and that it is disconnected from nearby waterways by residential areas, the application area is unlikely to provide significant habitat for rakali. Rakali may be transient visitors to the application area. Fauna management measures, as outlined below, will mitigate potential impacts to individuals if present at the time of clearing.

Quenda (P4)

Quenda inhabit areas of dense vegetation, including wetland fringes and heathlands (DEC, 2012). Quenda may be transient visitors to the application area while moving through the landscape. Given majority of the application area comprises non-native vegetation, and cleared areas will be revegetated, the proposed clearing is unlikely to impact significant habitat for this species. Fauna management measures, as outlined below, will mitigate potential impacts to individuals if present at the time of clearing.

Blue-billed duck (P4)

Breeding habitat for the blue-billed duck typically comprises secluded dense vegetation with nests constructed in Typha beds or other vegetation in permanent water (Australian Museum, 2024). Stands of *Typha orientalis* within the application area may provide potential breeding habitat for the blue-billed duck. Noting the extent of clearing proposed and condition of the vegetation, the application area is not likely to comprise significant breeding habitat for the blue-billed duck. Fauna management measures, as outlined below, will mitigate potential impacts to individuals if present at the time of clearing.

Carter's freshwater mussel (VU)

Carter's freshwater mussel has been recorded in waterways located approximately three kilometres from the application area. Noting the extent of clearing proposed, condition of the vegetation, surrounding residential land use, and that cleared areas will be rehabilitated, the proposed clearing is unlikely to impact Carter's freshwater mussel populations located nearby. The proposed clearing includes maintenance of Typha through chemical means. To reduce potential indirect impacts through chemical use, spraying of chemical solutions will only be undertaken during calm conditions when the water level is at its lowest.

Conclusion

Based on the above assessment, the application area is unlikely to provide significant habitat for fauna. The management measures specified below will reduce impacts to fauna present in or near the application area during clearing activities.

Conditions

To address the identified impacts, the following management measures will be imposed as conditions on the clearing permit:

- avoidance and minimisation to reduce the impacts and extent of clearing,
- take hygiene steps to minimise the risk of the introduction and spread of weeds and dieback to adjacent vegetation,
- undertake spraying of chemical solutions during the driest time of the year when the water level is at its lowest and during calm conditions, to limit unintended impacts to flora and fauna,
- avoid clearing of more than two mature native trees to reduce the impact of clearing,
- pre-clearing site inspections prior to works commencing and ongoing during works for any fauna that may be present. If found and are not able to move into adjacent habitat, the City must cease works until the identified fauna has been relocated,
- undertake slow, progressive one directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity, and
- revegetate and rehabilitate cleared areas to improve habitat value and stabilise the wetland.

3.2.2. Significant remnant vegetation - Clearing Principle (e)

Assessment

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 (i.e., pre-European settlement),

below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001).
The application area is in the Swan Coastal Plain IBRA Bioregion which retains about 39 per cent of the pre-European vegetation extent (Government of Western Australia, 2019). According to available databases, the vegetation extent in the local area and of the Cannington Complex falls below national targets, with about 13 and 14 per cent of the pre-European vegetation remaining, respectively (see Appendix A.2).

The Environmental Protection Authority (EPA) recognises the Perth Metropolitan Region to be a constrained area, in which a minimum 10 per cent representation threshold for ecological communities is recommended (EPA, 2008). The current vegetation extent for the Swan Coastal Plain IBRA Bioregion, Cannington Complex and the local area are above the 10 per cent threshold for constrained areas.

Most of the application area comprises non-native *Melaleuca quinquenervia* (see Appendix D). The proposed clearing of native vegetation is restricted to Typha species in the understorey and up to two *Melaleuca rhaphiophylla* trees. Given this, the proposed clearing is unlikely to impact a significant remnant of native vegetation in an extensively cleared landscape.

Conclusion

Based on the above assessment, the proposed clearing is unlikely to significantly impact the value of the patch of remnant vegetation. Revegetation of cleared areas, as outlined below, will improve the quality of the remnant vegetation patch.

Conditions

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

- avoidance and minimisation to reduce the impacts and extent of clearing,
- take hygiene steps to minimise the risk of the introduction and spread of weeds and dieback to adjacent vegetation,
- avoid clearing of more than two mature native trees to reduce the impact of clearing, and
- revegetate and rehabilitate cleared areas to improve habitat value and stabilise the wetland.

3.2.3. Water resources - Clearing Principles (f) and (i)

Assessment

The application area is within a mapped dampland. The application area is dominated by riparian species, including non-native *Melaleuca quinquenervia* and patches of Typha.

The purpose of proposed clearing includes to undertake basin upgrade works to improve drainage, including revegetating the area with native species to improve biofiltration. Given this, the proposed clearing and associated works are likely to improve the ecological values of the wetland within the application area.

The proposed clearing may temporarily increase sedimentation and turbidity in the application area. Noting the extent of clearing proposed, condition of the vegetation, and that cleared areas will be revegetated, any impacts to surface water quality are likely to be minimal and short-term.

Conclusion

Based on the above assessment, the proposed clearing is unlikely to significantly impact ecological values of riparian communities or water quality within the application area. Any impacts to surface water quality from the proposed clearing are likely to be minimal and short-term.

Conditions

- avoidance and minimisation to reduce the impacts and extent of clearing,
- undertake spraying of chemical solutions during the driest time of the year when the water level is at its lowest and during calm conditions, to limit unintended impacts to flora and fauna,
- avoid clearing of more than two mature native trees to reduce the impact of clearing, and
- revegetate and rehabilitate cleared areas to improve habitat value and stabilise the wetland.

3.3. Relevant planning instruments and other matters

DWER's Swan Avon (Water Regulation) branch advised a permit to interfere or obstruct a watercourse under the RIWI Act is not required in this instance (DWER, 2025).

No 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. Site Characteristics

A.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 B.

<table>
<tr><th>Characteristic</th><th>Details</th></tr>
<tr><td>Local context</td><td>The area proposed to be cleared is an isolated patch of native vegetation within the intensive land-use zone of Western Australia. The application area is surrounded by road infrastructure and residential developments.
Spatial data indicates the local area (10-kilometre radius from the centre of the application area) retains approximately 12 per cent of its original native vegetation cover.</td></tr>
<tr><td>Ecological linkage</td><td>The application area does not intersect a formal ecological linkage. The closest mapped ecological linkage is the Perth Regional Ecological Linkage, approximately two kilometres from the application area.</td></tr>
<tr><td>Conservation areas</td><td>The application area does not intersect a mapped conservation area. The closest mapped conservation area is Canning River Conservation Park, approximately two kilometres from the application area.</td></tr>
<tr><td>Vegetation description</td><td>Information supplied by the applicant (City of Canning, 2025) indicates the native vegetation within the application area comprises Typha orientalis, Melaleuca rhaphiophylla, and other scattered trees. The application area is dominated by non-native Melaleuca quinquenervia (see Appendix D).
This is broadly consistent with the mapped vegetation type:
Cannington Complex (system 40), described as a mosaic of vegetation from adjacent vegetation complexes of Bassendean, Karrakatta, Southern River and Vasse.
The mapped vegetation type retains approximately 11 per cent of the original extent (Government of Western Australia, 2019).</td></tr>
<tr><td>Vegetation condition</td><td>Information supplied by the applicant (City of Canning, 2025) and available imagery indicates the vegetation within the proposed clearing area is in Completely Degraded (Keighery, 1994) condition. The full Keighery (1994) condition rating scale is provided in Appendix C.</td></tr>
<tr><td>Climate and landform</td><td>The climate of the application area is Mediterranean, characterised by hot, dry summers and cool, wet winters. The application area receives an average annual rainfall of approximately 780 - 790 millimetres (Bureau of Meteorology, 2021). The application area is approximately 25 to 30 metres above sea level.</td></tr>
<tr><td>Soil description</td><td>The soil is mapped as EnvGeol S10 Phase (213Pj__S10), described as sand, comprising a relatively thin veneer over sandy clay to clayey sand, and is of aeolian origin (DPIRD, 2019).</td></tr>
<tr><td>Land degradation risk</td><td>The land degradation risk factors mapped over the application area are:
<table><tr><th>Risk categories</th><th>Land Unit 1</th></tr><tr><td>Wind erosion</td><td>M2: 30-50% of map unit has a high to extreme wind erosion risk</td></tr><tr><td>Water erosion</td><td>M1: 10-30% of map unit has a high to extreme water erosion risk</td></tr><tr><td>Salinity</td><td>M1: 10-30% of map unit has a moderate to high salinity risk or is presently saline</td></tr><tr><td>Subsurface Acidification</td><td>H2: >70% of map unit has a high subsurface acidification risk or is presently acid</td></tr><tr><td>Water logging</td><td>H1: 50-70% of map unit has a moderate to very high waterlogging risk</td></tr><tr><td>Water Repellence risk</td><td>M1: 10-30% of map unit has a high-water repellence risk</td></tr><tr><td>Phosphorus export risk</td><td>M2: 30-50% of map unit has a high to extreme phosphorus export risk</td></tr><tr><td>Flooding</td><td>M2: 30-50% of the map unit has a moderate to high flood risk</td></tr></table></td></tr>
<tr><td>Waterbodies and Hydrography</td><td>Desktop assessment and review of aerial imagery indicate the application area intersects a mapped multiple use dampland.</td></tr>
</table>

Characteristic	Details
	The application area is located within the Middle Canning Surface Water Resource and the Perth Groundwater Area, as proclaimed under the *Rights in Water and Irrigation Act 1914* (RIWI Act). Groundwater salinity within the application area is mapped at 500 - 1,000 milligrams per litre total dissolved solids.
Flora	There are 120 conservation significant flora taxa recorded within the local area. The closest records are *Caladenia huegelii* and *Conospermum undulatum*, located approximately 840 metres from the application area.
Ecological communities	There are no threatened or priority ecological communities mapped within the application area. The closest mapped TEC is the Banksia Woodlands of the Swan Coastal Plain ecological community, approximately 470 metres from the application area.
Fauna	There are 70 conservation significant fauna species recorded in the local area. The closest fauna record is the Perth slider (lined skink), located approximately 60 metres from the application area. There are 57 black cockatoo roost sites recorded within the local area. The closest known black cockatoo roosting site is approximately one kilometre from the application area.

A.2. Vegetation extent

	Pre-European extent (ha)	Current extent (ha)	Extent remaining (%)	Current extent in all DBCA managed land (ha)	Current proportion (%) of pre-European extent in all DBCA managed land
IBRA bioregion*					
Swan Coastal Plain	1,501,221.93	579,813.47	38.62	222,916.97	17.98
Vegetation complex**					
Cannington Complex (system 40)	16,661.33	1,965.94	11.80	981.34	5.89
Local area					
10km radius	30513.56	3937.80	12.9	-	-

*Government of Western Australia (2019b)

**Government of Western Australia (2019a)

A.3. Fauna analysis table

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Distance of closest record to application area (km)
Oxyura australis (blue-billed duck)	P4	Y	Y	1.2
Isoodon fusciventer (Quenda)	P4	Y	Y	0.9
Hydromys chrysogaster (rakali)	P4	Y	Y	2.7
Westralunio carteri (Carter's freshwater mussel)	VU	Y	Y	1.7

Appendix B. 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: Noting the extent of clearing proposed and condition of the vegetation, the application area is unlikely to comprise a high level of biodiversity. It is not anticipated that the proposed clearing will significantly impact conservation significant flora or fauna habitat.	Not likely to be at variance	Yes *Refer to Section 3.2.1, above.*
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 application area may contain suitable habitat for conservation significant fauna. Given the extent of clearing proposed and condition of the vegetation, the proposed clearing is unlikely to have a significant impact on fauna habitat.	May 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: A flora likelihood assessment was conducted based on habitat and soil preferences, vegetation in the application area, and known species distribution. The assessment did not identify suitable habitat for threatened flora species in the application area, given the extent of proposed clearing and degraded condition of the vegetation.	Not likely to be at variance	No
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 application area does not contain vegetation that indicates the presence of a TEC. The application area is not representative of the nearby mapped Banksia Woodland TEC. The proposed clearing is unlikely to impact a TEC.	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 native vegetation in the local area is marginally above the minimum threshold for constrained areas (EPA, 2008). However, noting the proposed clearing is to remove *Typha*, the vegetation proposed to be cleared is not considered to be a significant remnant of native vegetation.	May be at variance	*Yes* *Refer to Section 3.2.2, above.*
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 the distance to the nearest conservation area, and the degraded condition of vegetation in the application area, the proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas.	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
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: The application area is within a mapped multiple use dampland and contains riparian vegetation.	At variance	Yes *Refer to Section 3.2.3, 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 highly susceptible to subsurface acidification. Noting the extent of proposed clearing and that it is within a wetland, the proposed clearing is unlikely to cause appreciable 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: The removal of Typha may increase water turbidity in the short term. The purpose of proposed clearing is to improve drainage infrastructure, which is likely to improve water quality over time.	May be at variance	Yes *Refer to Section 3.2.3, above.*
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: Noting the extent of clearing proposed, the mapped soils and topographic contours within and surrounding the application area, and that the purpose of clearing is to improve drainage infrastructure, the proposed clearing is unlikely to increase the incidence or intensity of flooding.	Not likely to be at variance	No

Appendix C. 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

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 Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Measuring vegetation condition for the South West and Interzone Botanical Province (Keighery, 1994)

Condition	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance.
Excellent	Vegetation structure intact, with disturbance affecting individual species; weeds are non-aggressive species.

Condition	Description
Very good	Vegetation structure altered, with obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and/or grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and/or grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and/or grazing.
Completely degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

Appendix D. Maps of the vegetation

Appendix E. Sources of information

H.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)
- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- Cadastre Address (LGATE-002)
- Contours (DPIRD-073)
- 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
- Local Planning Scheme – Zones and Reserves (DPLH-071)
- Native Title (ILUA) (LGATE-067)
- Offsets Register – Offsets (DWER-078)
- Pre-European Vegetation Statistics
- Public Drinking Water Source Areas (DWER-033)
- Ramsar Sites (DBCA-010)
- Regional Parks (DBCA-026)
- 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
- Soil Landscape Mapping – Systems
- Wheatbelt Wetlands Stage 1 (DBCA-021)

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
- Threatened Ecological Communities and Priority Ecological Communities (Buffers)

H.2. References

Australian Museum (2024) *Blue-billed Duck*. Available from https://australian.museum/learn/animals/birds/blue-billed-duck/.

City of Canning (2025) *Clearing permit application CPS 11291/1*, received 09 October 2025 (DWER Ref: DWERVT20163).

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

Department of Agriculture, Water and Environment (DAWE) now Department of Climate Change, Energy, the Environment and Water DCCEEW) (2022). Referral guideline for 3 WA threatened black cockatoo species. Available from: Referral guideline for 3 WA threatened black cockatoo species

Department of Environment and Conservation (DEC) (2012) *Fauna profiles: Quenda,* Isoodon obesulus fusciventer. Department of Environment and Conservation, Western Australia.

Department of Environment Regulation (DER) (2025). *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.

Department of Primary Industries and Regional Development (DPIRD) (2019). *NRInfo Digital Mapping. Department of Primary Industries and Regional Development.* Government of Western Australia. URL: https://maps.agric.wa.gov.au/nrm-info/

Department of Water and Environmental Regulation (DWER) (2026) *Rakali - water rat* - Hydromys chrysogaster. Available from: https://rivers.dwer.wa.gov.au/species/hydromys-chrysogaster/

Department of Water and Environmental Regulation (DWER) (2025) *RIWI advice for clearing permit CPS 11291/1*, received 11 November 2025 (DWER Ref DWERDT1284410).

Department of Water and Environmental Regulation (DWER) (2016). *Procedure: Native vegetation clearing permits*. Joondalup. Available from: https://dwer.wa.gov.au/sites/default/files/Procedure_Native_vegetation_clearing_permits_v1.PDF.

Government of Western Australia (2019a) *2018 South West Vegetation Complex Statistics. Current as of March 2019*. WA Department of Biodiversity, Conservation and Attractions, Perth, https://catalogue.data.wa.gov.au/dataset/dbca

Government of Western Australia. (2019b) *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

Heddle, E. M., Loneragan, O. W., and Havel, J. J. (1980) *Vegetation Complexes of the Darling System, Western Australia*. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.

Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Western Australian Herbarium (1998-). *FloraBase - the Western Australian Flora*. Department of Biodiversity, Conservation and Attractions, Western Australia. https://florabase.dpaw.wa.gov.au/