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 10452/1
Permit type:	Area permit
Applicant name:	Shire of York
Application received:	14 December 2023
Application area:	One native tree
Purpose of clearing:	Reconstructing river crossing culverts and roadway
Method of clearing:	Mechanical Removal
Property:	Crown Reserve 19039, Malebelling
Location (LGA area/s):	Shire of York
Localities (suburb/s):	Malebelling

1.2. Description of clearing activities

The clearing application was submitted by the Shire of York (the Shire) for an Area Permit to clear one native tree (*Eucalyptus rudis* (flooded gum)) within Crown Reserve 19039, Malebelling, for the purpose of reconstructing river crossing culverts and a roadway (Shire of York, 2023a).

1.3. Decision on application

Decision:	Granted
Decision date:	28 March 2024
Decision area:	One native tree, 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 14 days and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (Appendix B), relevant datasets (Appendix F.1), images provided by the Shire (Appendix E), the clearing principles set out in Schedule 5 of the EP Act (Appendix C), relevant planning instruments and any other matters considered relevant to the assessment (Section 3).

The assessment identified that the proposed clearing will result in:

- the introduction and spread of weeds and dieback into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values;
- loss of native vegetation within an extensively cleared landscape; and
- impact on surface water quality of watercourses within and adjacent to the proposed clearing area.

After consideration of the available information, as well as the Shire's avoidance and mitigation measures (Section 3.1), the Delegated Officer determined the proposed clearing is unlikely to lead to appreciable land degradation or have long-term adverse impacts on conservation significant fauna and can be minimised and managed to be unlikely to lead to an unacceptable risk to environmental values.

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

- avoid, minimise to reduce the impacts and extent of clearing.
- take hygiene steps to minimise the risk of the introduction and spread of weeds and dieback.
- plant a minimum of two *Eucalyptus rudis* (flooded gum) seedlings within Crown Reserve 19039, Malebelling, to mitigate the loss of one *Eucalyptus rudis* (flooded gum) in an extensively cleared landscape.

1.5. Site map

Figure 1: Map of the application area CPS 10452/1. The area crosshatched yellow indicates the area authorised to be cleared under the granted clearing permit.

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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 Shire provided information explaining the potential disturbance of the tree within the clearing area and demonstrated measures of avoidance and mitigation to reduce the potential clearing to the one native tree (Shire of York, 2023a).

Avoidance
The application area is a vehicular crossing on the Avon River approximately six kilometres north of the York townsite. This crossing was upgraded in 2017 and at that time the remnant *Eucalyptus rudis* (flooded gum) tree was left untouched, however, the crossing was built around the tree. The tree is currently surrounded by concrete embankment stabilisation and the road itself (see photographs in Appendix E) (Shire of York, 2023a). In 2021 after a flooding event the entire crossing was damaged and has been closed/unused since then. The Shire of York are currently planning to reconstruct the crossing to make it trafficable again.

The planned reconstruction works will be restricted to the existing road area. Damage to all other vegetation has been avoided by management of the project footprint. However, given that the concrete completely surrounds the base of the tree it is possible that demolition of the road crossing for reconstruction will damage the root system of the tree, with the risk that it will result in the death of the tree (Shire of York, 2023a). The project itself does not require the removal of the tree, however, given the amount of concrete surrounding the tree it is likely that damage cannot be avoided (Shire of York, 2023a).

Mitigation
To mitigate the loss of this tree the Shire plans to revegetate an adjacent area of riparian zone. Species selection will be made in conjunction with the York River Conservation Society who are experienced in riparian restoration in the Avon River. The Shire have noted that their revegetation would include up to ten flooded gum tube stock and accompanying ground and mid layer species (Shire of York, 2023a).

The Delegated Officer was satisfied that the Shire has made a reasonable effort to avoid and mitigate 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 (Appendix B) and the extent to which the impacts of the proposed clearing present a risk to biological, conservation, and/or land and water resource values.

The assessment against the clearing principles (Appendix C) identified that the impacts of the proposed clearing present a potential risk to threatened fauna, mapped ecological communities, significant remnant vegetation and a watercourse. 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 Principle (b)

Assessment
Within the local area (10 kilometre radius of the application area), eight conservation significant fauna species have been recorded. As the clearing application is for the removal of tree habitat only and not any understorey, it is only likely for the proposed clearing to impact the arboreal species recorded in the local area, which are the black cockatoos. It must be noted that *Calyptorhynchus sp.* (white-tailed black cockatoo) have been recorded in the local area. These records were obtained when the data collector could not definitively distinguish if they spotted a Carnaby's or Baudin's black cockatoo, therefore the white-tailed black cockatoo category was created to incorporate these records.

Black Cockatoo species

The tree species proposed to be cleared is a *Eucalyptus rudis* (flooded gum) (Shire of York, 2023a). This tree is known to provide roosting habitat for *Zanda latirostris* (Carnaby's black cockatoo) (Bancroft and Bamford, 2023) which are listed as endangered under the BC Act and the Commonwealth EPBC Act. According to available mapping the application area is located within the boundary in which Carnaby's black cockatoo are likely to breed.

Breeding habitat
Suitable breeding habitat for black cockatoos includes trees which either have a suitable nest hollow or are of a suitable diameter at breast height (DBH) to develop a nest hollow (DCCEEW, 2022). Carnaby's black cockatoos generally roost in or near riparian environments or natural and artificial permanent water sources. Any tall trees may provide roosting habitat, but particularly *E. occidentalis* (flat-topped yate), salmon gum, wandoo, marri, karri, blackbutt, tuart, introduced eucalypts and introduced pines (DCCEEW, 2022).

The Shire have observed that Carnaby's black cockatoos do not utilise habitat to the east of the township of York (Shire of York, 2024c) and this can be supported by the absence of records of black cockatoo sightings, breeding and roosts in the eastern half of the 10 kilometre radius from the application area. According to available records, there is only one unconfirmed roost located approximately 6.21 kilometres southwest of the application area, and ten records of Carnaby's black cockatoos in the local area (all located in the western half of the 10 kilometre buffer), with the closest to the application area being approximately 1.46 kilometres.

The Shire completed an inspection of the tree proposed to be cleared and provided photographs (Appendix F - Figure 2 and 3), concluding that this flooded gum is unlikely to be tall enough to be suitable for black cockatoo roosting (Shire of York, 2024c). In addition, the hollows available within this tree are small, located within the canopy and at the incorrect angle, appearing to be unsuitable for Carnaby's black cockatoos (Shire of York, 2024c).

Eucalyptus rudis is not a known primary foraging resource for black cockatoos (DCCEEW, 2022). Noting the clearing is only for one tree, the proposed clearing is not likely to be significant foraging habitat.

Conclusion
Based on the above assessment, the application area is unlikely to provide significant habitat for black cockatoos. For the reasons set out above, it is considered that the impacts of the proposed clearing to significant habitat for Carnaby's cockatoo does not constitute a significant residual impact.

Conditions
No fauna management conditions required.

3.2.2. Environmental values (ecological communities) - Clearing Principles (a) and (d)

Assessment
According to available databases, the application area is located within the 'Eucalypt woodlands of the Western Australian Wheatbelt - Wheatbelt Woodlands' which is listed as a Critically Endangered Threatened Ecological Community (TEC) under the Commonwealth EPBC Act and Priority 3 Priority Ecological Community (PEC) by the Department of Biodiversity, Conservation and Attractions (DBCA).

The native tree proposed to be cleared is an isolated tree within a Completely Degraded (Keighery, 1994) location, which does not meet the criteria to form part of this ecological community. Most patches on roadsides will fall outside the proposed listing criteria despite the available mapping showing the contrary, as the listing protects patches that are larger and remain in reasonably intact condition (DoE, 2016). There is remnant vegetation in the adjacent riparian zone of the Avon River that more closely represents this TEC, including a number of examples of flooded gum as well as sheoak and a mixed shrub layer (Shire of York, 2023a).

The construction works associated with the proposed clearing may impact on the environmental values of the local area by facilitating the spread of weeds and dieback.

Conclusion
The proposed clearing is not likely to impact on the mapped TEC. Weed and dieback management practices will minimise impacts to the adjacent areas.

Conditions
To address the above impacts, the following management measure will be required as a condition on the clearing permit:

- Weeds and dieback management measures as specified in the clearing permit.

3.2.3. Environmental values (significant remnant vegetation) - Clearing Principle (e)

Assessment
The National Objectives Target 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) (Commonwealth of Australia, 2001). This is the threshold level below which species loss appears to accelerate exponentially at an ecosystem level. According to available databases, the area proposed to be cleared consists of the vegetation association York – 352, which is described as wheatbelt; York gum, salmon gum etc. *Eucalyptus loxophleba*, *E. salmonophloia*. Goldfields; gimlet, redwood etc. *E. salubris, E. oleosa*. Riverine; rivergum *E. camaldulensis*. Tropical; messmate, woolybush. From photos received from the Shire, the application area is a completely degraded representation of the York – 352 association.

The York – 352 association retains only 17.27 per cent vegetation coverage of its pre-European native vegetation extent. Within a 10 kilometre radius of the application area, approximately 8.59 per cent of the pre-European native vegetation extent remains (Government of Western Australia, 2019). The local area and mapped vegetation type is inconsistent with the national target of biodiversity conservation of Australia.

Whilst the proposed clearing is located within an extensively cleared landscape, the application area does not contain any conservation significant flora, does not provide significant habitat for any conservation significant fauna, does not contain high levels of biodiversity nor impact on the road to function as an ecological linkage. Given the above, it is considered that the impact of clearing can be mitigated through appropriate onsite revegetation.

The Shire have committed to planting two *Eucalyptus rudis* (flooded gum) seedlings to mitigate the clearing of one tree, to ensure the clearing will not contribute to the decline of vegetation within the local area. DWER has assessed the suitability of this mitigation measure. The mitigation planting proposed was input into the *WA Environmental Offsets Metric Calculator* to determine the ratio required to mitigate the loss of one tree. From this, a minimum of two trees were determined to be a suitable mitigation measure. DWER considers that the mitigation planting aligns with the *WA Environmental Offset Policy (2011)* and *WA Environmental Offsets Guideline (2014)*.

Conclusion
Clearing in the area will contribute to the further loss of native vegetation cover in the Avon Wheatbelt region. As a result, avoidance and mitigation measures were requested from the Shire. In response the Shire will not be removing any native vegetation other than the one flooded gum that may be adversely affected by the reconstruction works of the river road crossing. The Shire also committed to mitigation measures, which will ensure the planting and survival of a minimum of two *Eucalyptus rudis* (flooded gum) seedlings within the same reserve, to mitigate the clearing. It is considered that the impact of clearing can be mitigated through appropriate onsite revegetation and that a significant residual impact does not remain.

Conditions
To ensure there is no net loss of trees within the local area, the following management measure will be required as a condition on the clearing permit:

- Survival of two *Eucalyptus rudis* (flooded gum) seedlings being planted within the same reserve as the clearing.

3.2.4. Environmental values (water resources) - Clearing Principle (f)

Assessment
The application area occurs in association with an environment associated with a watercourse, and the tree proposed to be cleared is a flooded gum, which may be indicative of a riparian area. However, given the proposed clearing in this riparian location is limited to an isolated tree in a Completely Degraded (Keighery, 1994) area, it is not considered likely that the proposed clearing will result in any significant impacts to the ecological values of the vegetation communities associated with the watercourses.

The tree proposed to be cleared is an isolated tree that is located on a bank in the middle of the Avon River, where the river branches out to a tributary (see Figure 1) and is adjacent to four collapsed culverts. The concrete, rock pitching and embankment will require demolition, in order to repair the road crossing (Shire of York, 2023a).

Due to the location of the application area and as the Avon River is within a surface water area proclaimed under the RIWI Act, the Shire have been required to obtain a permit under Section 17 of the RIWI Act to conduct the restoration works on the river crossing. The permit conditions that the Shire are required to abide by will ensure that the authorised modification does not act as an artificial barrier or levee, causing water to pond upstream and that the works authorised by the permit create minimal disturbance to the bed and banks of the Avon River (DWER, 2024b).

Conclusion
Based on the above assessment, the proposed clearing will result in the loss of one native tree in an environment associated with a watercourse. For the reasons set out above, the proposed clearing is unlikely to result in any significant or long-term impacts to the quality of surface water or to the ecological values of the riparian communities associated with the watercourse. In considering the above, the Delegated Officer determined that the impacts of the proposed clearing on water resources does not constitute a significant residual impact.

Conditions
No vegetation management conditions required.

3.2.5. Relevant planning instruments and other matters

The application area is located within the Avon River Surface Water Area - UFI 29, proclaimed under the RIWI Act. The Shire were granted a 'Permit to Obstruct or Interfere' (PMB209004(2)) by the Minister under section 17 of the RIWI Act (as an amendment of their initial permit PMB209004(1)) on 26 March 2024 to incorporate the application area (DWER, 2024b).

Currently, the Mackie Siding Road crossing where the tree proposed to be cleared is located, is not vested as a road reserve, however, is mapped as part of Reserve 19039 that is vested in the Shire for the purpose of 'Common'. This reserve includes the riverbed. The tenure of the land is currently being altered to a road reserve through the Department of Planning, Lands and Heritage (DPLH) (Shire of York, 2023a).

The application area is located within the boundaries of the Ballardong People Indigenous Land Use Agreement (WI2017/012) and within the Aboriginal Heritage Place the Avon River Place ID: 15979 – Mythological, Camp, Natural Feature, Water Source, Other: Food Resource. There are several other Aboriginal Heritage Places within the local area (10 kilometre radius from the area proposed to be cleared). 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 the Applicant

Summary of comments	Consideration of comment
Further information regarding the hollows located within the tree proposed to be cleared (Shire of York, 2024c)	This information was considered in Section 3.2.1 – Assessment of impacts on environmental values – Biological values (fauna) of this report.

Appendix B. 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.

B.1. Site characteristics

Characteristic	Details
Local context	The native vegetation, comprised of one native tree proposed to be cleared, is located on the side of an unused vehicular crossing on the Avon River approximately six kilometres north of the York townsite. It is located within an intensive land use zone of the Wheatbelt. Aerial imagery and spatial data indicate the local area (10 kilometre radius from the area proposed to be cleared) retains approximately 8.59 percent of the original remnant vegetation cover, which is classified as an extensively cleared area.
Ecological linkage	The area proposed to be cleared is unlikely to contribute to an ecological linkage along the river crossing as it is an isolated tree.
Conservation areas	Mackie Siding Road adjacent to the application area was surveyed as a roadside conservation – road centreline (DBCA-030) area in April 1988, and no weeds were identified on both sides of the road. The application area is located within the mapped unnamed Crown reserve (R 19039) vested in the Shire.
Vegetation description	The Shire identified the tree proposed to be cleared as a *Eucalyptus rudis* (flooded gum) (Shire of York, 2023a). Representative photos are available in Appendix F. Available databases indicated that the application area is located within the Avon Wheatbelt IBRA region and within the York 352 vegetation association described as wheatbelt; York gum, salmon gum etc. *Eucalyptus loxophleba*, *E. salmonophloia*. Goldfields; gimlet, redwood etc. *E. salubris, E. oleosa*. Riverine; rivergum *E. camaldulensis*. Tropical; messmate, woolybush. York 352 vegetation association retains approximately 17.27 per cent of the original extent (Government of Western Australia, 2019).
Vegetation condition	The tree proposed to be cleared is a remnant *Eucalyptus rudis* (flooded gum) and it was observed to be in declining condition with sparse canopy and moderate volume of deadwood. There are several dead branch stubs which contain small hollows. The value of the tree is as a habitat tree providing hollows for small fauna. Photographs of the tree are provided at Appendix F (Shire of York, 2023a).
Climate	Mean annual rainfall: 400 millimetres (western) to 500 millimetres (eastern). Annual evapotranspiration (areal actual): 400 millimetres (western) to 500 millimetres (eastern).
Soil description	The application area is located within the Avon flat wet, river Phase, Avon Flats System - 256AfW – described as alluvial flats, in the northern Zone of Rejuvenated Drainage, with brown loamy earth, grey non-cracking clay and brown deep sand. York gum-salmon gum-flooded gum-sheoak woodland.
Land degradation risk	**Risk categories** / **Avon flat wet, river Phase, Avon Flats System - 256AfW** Wind erosion / L1 : <3% of map unit has a high to extreme wind erosion risk Water erosion / H1: 50-70% of map unit has a high to extreme water erosion risk

<table>
<tr><th>Characteristic</th><th>Details</th></tr>
<tr><td></td><td>
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<tr><td>Water logging</td><td>H2: >70% of map unit has a moderate to very high waterlogging risk</td></tr>
<tr><td>Water Repellence</td><td>L1: <3% of map unit has a high water repellence risk</td></tr>
<tr><td>Sub-surface Acidification</td><td>H1: 50-70% of map unit has a high subsurface acidification risk or is presently acid</td></tr>
<tr><td>Phosphorous export</td><td>H2: >70% of map unit has a high to extreme phosphorus export risk</td></tr>
<tr><td>Salinity</td><td>M2: 30-50% of map unit has a moderate to high salinity risk or is presently saline</td></tr>
<tr><td>Flooding</td><td>H2: >70% of the map unit has a moderate to high flood risk</td></tr>
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<tr><td>Waterbodies and Hydrogeography</td><td>The application area is in the Northern Zone of Rejuvenated Drainage Hydrological Zone - Erosional surface of gently undulating rises to low hills. Continuous stream channels that flow in most years. Colluvial processes are active. Soils formed in colluvium or in-situ weathered rock. Mainly from Jimperding Metamorphic Rocks. The application area also lies within the Swan Avon Main Avon hydrographic catchment (UFI 163) in the South West Catchment Division (Division No. 6).

The tree proposed to be cleared is located on the bank of the Avon River (Object ID: 209922) which is within the Avon River Catchment Area, a proclaimed surface water area under the RIWI Act. The application area is not located within a proclaimed groundwater area under the RIWI Act, a public drinking water source area or a Country Areas Water Supply Act 1947 (CAWS Act) catchment area.

Groundwater salinity is mapped as 14,000-35,000 Total Dissolved Solids (TDS) and it is located within the 1 in 10 (10%) AEP floodplain (UFI: 286) of the Avon River</td></tr>
<tr><td>Flora</td><td>There are records of 22 conservation significant flora within the local area, 18 Priority listed and four listed on the Threatened species list. The closest record is a Priority 4 species Acacia cuneifolia, recorded approximately 3.49 kilometres from the application area.

There are no records of conservation significant flora within the application area.

As the clearing application is for the potential disturbance of one tree located within the concrete embankment of a road culvert with no understorey present, no conservation significant flora are likely to be impacted by the clearing.</td></tr>
<tr><td>Ecological communities</td><td>The application area is located within the mapped TEC – the Eucalypt woodlands of the Western Australian Wheatbelt - Wheatbelt Woodlands, listed as Critically Endangered under the Commonwealth EPBC Act and Priority 3 PEC by DBCA. However, the application area itself does not meet the criteria to be classified as this TEC.</td></tr>
<tr><td>Fauna</td><td>There are records of eight conservation significant fauna species found in the local area, four of which are on the threatened species list under the BC Act, three are listed as priority fauna and one listed under the subset of ‘Specially Protected Fauna’ which comes under the Wildlife Conservation (Specially Protected Fauna) Notice 2018.

The application area is within the mapped boundary for breeding habitat for Carnaby's black cockatoo. One record of a Zanda baudinii (Baudin's cockatoo), ten records of Carnaby’s black cockatoos and one record of white-tailed black cockatoos have been recorded in the local area.

The closest black cockatoo roost to the application is an unconfirmed roost that is approximately 6.21 kilometres to the south-west.

A detailed fauna table can be found in Appendix B.3.</td></tr>
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B.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*					
Avon Wheatbelt	9,517,109.95	1,761,187.42	18.51	174,980.68	1.84
Vegetation association					
York - 352	630,577.61	108,887.52	17.27	10,191.45	1.62
Remnant vegetation*					
Remnant vegetation mapped within 10 km	31,459.33	2,701.13	8.59	-	-

*Government of Western Australia (2019)

B.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)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
Falco peregrinus (peregrine falcon)	OS	No	No	0.05	2	Yes
Zanda latirostris (Carnaby's cockatoo)	EN	Yes	Yes	1.46	10	Yes
Zanda sp. 'white-tailed black cockatoo'	EN	Yes	Yes	5.95	1	Yes
Idiosoma schoknechtorum (Mortlock River shield-backed trapdoor spider)	P3	No	No	6.11	3	N/A
Leipoa ocellata (malleefowl)	VU	No	No	6.30	2	N/A
Neelaps calonotos (black-striped snake, black-striped burrowing snake)	P3	No	No	6.30	1	N/A
Lagostrophus fasciatus fasciatus (banded hare-wallaby, mernine)	VU	No	No	6.30	1	N/A
Hydromys chrysogaster (water-rat, rakali)	P4	No	No	6.43	2	N/A
Zanda baudinii (Baudin's cockatoo)	EN	No	No	8.30	1	Yes

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority, OS: other specially protected species

B.4. Ecological community analysis table

Community name	Conservation status	Suitable habitat features ? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Are surveys adequate to identify? [Y, N, N/A]
Eucalypt woodlands of the Western Australian Wheatbelt - Wheatbelt Woodlands	Priority 3/CR	N	N	N	0	NA

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

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 not likely to contain local or regionally significant flora or assemblages of plants. The area is mapped as a PEC, however, the vegetation within the application area does not meet the criteria of a PEC.	May be at variance	Yes *Refer to Section 3.2.2. 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 area proposed to be cleared may contain habitat for threatened fauna.	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: The area proposed to be cleared does not contain any threatened flora, due to the location of area proposed to be cleared being the concrete embankment of a river crossing with no understorey.	Not 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 is located with an area mapped as a TEC listed under EPBC Act, however, the vegetation within the application area does not meet the criteria of the TEC.	Not likely to be at variance	Yes *Refer to Section 3.2.2. above.*
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 and the native vegetation in the local area is not consistent with the national objectives and targets for biodiversity conservation in Australia.	At variance	Yes *Refer to Section 3.2.3. 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, the proposed clearing is not likely to have an impact on the environmental values of any 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:	At variance	Yes *Refer to Section 3.2.4. above.*

Assessment against the clearing principles	Variance level	Is further consideration required?
Given the native tree proposed to be cleared is located on the bank of a water course, the proposed clearing may impact an environment associated with the watercourse.		
Principle (g): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."* Assessment: Given the location of the application area is on the inner embankment of a river crossing, the clearing of one native tree surrounded by concrete is unlikely 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: Given the nature of the clearing being one native tree within the concrete embankment of a river crossing, it is unlikely to impact surface or ground water quality.	Not at variance	No
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.	Not 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 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.
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 E. Photographs of the vegetation

Figure 2: *Eucalyptus rudis* (flooded gum) located within the area proposed to be clearing in clearing application CPS 10452/1 (Shire of York, 2023b)

Figure 3: Photograph of the area in which revegetation is to occur to mitigate the clearing associated clearing application CPS 10452/1 (Shire of York, 2023a)

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)
- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- Cadastre Address (LGATE-002)
- 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)
- 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

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)

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