

To: Kylie Calhoun, Assistant Secretary, Environment Assessments West (WA, SA, NT) Branch  
(for decision)

Document 1

**Approval Decision Brief (assessment report) – Vasse Diversion Drain Upgrade,  
Busselton, WA, (EPBC 2017/7932)**

**Timing:** 28 September 2020 – Statutory timeframe for a final decision

**Recommendation/s:**

1. Consider the state assessment report and clearing permit at Attachment C.

**Considered / ~~Please discuss~~**

2. Approve, for each controlling provision, the action as summarised in the table below.

**Approved / ~~Not approved~~**

3. Agree to attach the conditions of approval as set out in Attachment A.

**Agreed / ~~Not agreed~~**

4. If you agree to 2 and 3, accept the reasoning in the departmental briefing package as the reasons for your decision.

**Accepted / ~~Not accepted~~**

5. Sign the notice of your decision at Attachment A.

**Signed / ~~Not signed~~**

6. Sign the letters at Attachment B advising the person proposing to take the action, and other relevant parties, of your decision.

**Signed / ~~Not signed~~**

**Summary of recommendations on each controlling provision:**

| Controlling Provisions<br>for the action               | Recommendation |                   |
|--|----------------|-------------------|
|  | Approve        | Refuse to Approve |
| Listed threatened species and communities (ss 18, 18A) | Approved       |                   |

24 September 2020

Date:

**Kylie Calhoun, Assistant Secretary, Assessments West (WA,  
SA, NT) Branch**

**Comments:**

## Key Points:

### Background

1. On 4 September 2020, following consideration of the Department's proposed approval decision brief (Attachment D), you as a delegate of the Minister, proposed to approve the taking of the proposed action under section 130(1) and 133 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). At the same time, you suspended the approval timeframe under section 132 of the EPBC Act to await the finalisation of the Western Australian approvals process to enable alignment of conditions between both regulators.
2. The designated proponent and the person proposing to take the action, is the Water Corporation of Western Australia (the proponent)
3. As advised in the Department's proposed approval decision brief (Attachment D), on 20 August 2020 an appeal was lodged with the WA Office of the Appeals Convenor by the Busselton-Dunsborough Environment Centre (the appellant) against the Western Australian clearing permit CPS 8919/1.
4. On 4 September 2020, as recommended in the proposed approval decision brief (Attachment D), you also wrote to the proponent and Mr Mike Rowe, the Director General of the Western Australian Department of Water and Environmental Regulation (WA DWER) and delegated contact for the Western Australian Minister for Environment and Disability Services, Mr Stephen Dawson MLC, seeking comments on the proposed decision.
5. This brief considers the outcome of the consultation and seeks your decision on whether or not to approve (and what conditions to attach to) the taking of the proposed action, being the upgrade of 6 km of the Vasse diversion drain infrastructure to meet the present flood engineering standards, reducing the risk of failure during a flood event and consequent damage to adjacent properties in the City of Busselton, approximately 220 km south of Perth, Western Australia, as described in the EPBC Act referral EPBC 2017/7932.
6. On 9 September 2020, the proponent informed the Department that the appeal against the decision to grant clearing permit CPS 8191/1 had been withdrawn by the appellant (Attachment E). WA DWER confirmed the withdrawal of the appeal on 11 September 2020 (Attachment F3). As a result, the Department considers that there will be no change to the existing state conditions as outlined in clearing permit CPS 8919/1.
7. On 10 September 2020, the proponent provided the Department with an updated fauna management plan for consideration (Attachment G1). The Department reviewed the fauna management plan and considers the information provided to be adequate for managing fauna species, including for the Western Ringtail Possum (*Pseudocheirus occidentalis*).
8. An updated revegetation plan (Attachment G2) provided to the Department on 10 September 2020 states that the total revegetation area has increased to 14.69 ha. This is an increase of 3.8 ha of revegetation to what was determined by the Department (10.89 ha) to offset the significant residual impacts to the Western Ringtail Possum as detailed in the proposed approval decision brief (Attachment D).
9. The Department notes that the additional revegetation is a voluntary commitment resulting from discussions between the proponent and the appellant to resolve the concerns raised by the appeal. The Department considers the offset of 10.89 ha, as outlined in the proposed

approval decision brief ([Attachment D](#)), meets the requirements of the EPBC Act Offsets Policy and the additional voluntary revegetation not be included in the condition setting through this final approval. The Department notes that the additional revegetation will be monitored by the WA DWER as part of their clearing permit approval process providing assurance that the completion criteria required for the EPBC offset will also apply to the additional voluntary revegetation areas.

10. On 11 September 2020, the proponent provided the Department with an updated Construction Environment Management Framework ([Attachment G3](#)) and *Phytophthora* dieback risk assessment report ([Attachment G4](#)). The Department considers these documents meet the Department's Environment Management Plan Guidelines ([Attachment I](#)).
11. Since the appeal was withdrawn and the proponent provided the Department with the information required for the final approval, the final approval decision clock was restarted on 11 September 2020 with a revised statutory final approval timeframe of 28 September 2020.

#### Issues/ Sensitivities

12. The matters for consideration and factors to be taken into account for your decision remain as set out in the proposed approval decision brief ([Attachment D](#)).
13. The proposed action is likely to directly impact on 2.16 ha of Western Ringtail Possum habitat ranging from completely degraded to very good condition. The Western Ringtail Possum is currently listed as critically endangered. The Department notes that the species was listed as vulnerable at the time of the Section 75 Controlled Action decision.
14. The Department considers that the proponent has avoided direct impacts to breeding and potential roosting habitat from the proposed action and is unlikely to have residual impacts on Baudin's Black Cockatoo (*Calyptorhynchus baudinii*), Forest Red-tailed Black-Cockatoo (*Calyptorhynchus banksii naso*), and Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*).
15. Impacts to Carburnup King Spider Orchid (*Caladenia procera*) will be acceptable as none will be cleared during the proposed action. Spring survey (September – October 2020) will be conducted by a suitably qualified biologist to identify the presence of any Carburnup King Spider Orchid individuals and a flora management plan will be prepared to avoid/minimise impacts to the species.

#### Consultation:

16. The proponent and the WA DWER were invited to comment on the proposed decision between 7 September 2020 and 18 September 2020.
17. On 10 September 2020, the proponent responded in an email ([Attachment F1](#)) that they had no comments on the proposed decision.
18. On 11 and 16 September 2020, WA DWER advised that the proposed decision was consistent with the Western Australian approval conditions ([Attachment F2 and F3](#)).
19. Based on discussions with the proponent and the WA DWER subsequent to the provision of the revised fauna management plan as described in paragraph 7 above, the Department has adjusted the proposed condition 8, namely:

| Proposed Condition   | Revised final condition   |
|--|---|
| The approval holder must provide a <b>fauna management plan</b> for approval by the <b>Department</b> prior to the <b>commencement of the action</b> . | The approval holder must implement the <b>fauna management plan</b> provided to the <b>Department</b> on 10 September 2020. |

20. On 18 September 2020 and 21 September 2020, the proponent and WA DWER respectively advised that the proposed minor change to condition 8 as set out above was acceptable (Attachment J1 and J2).
21. The Department consulted and considered the EPBC Act Species and Ecological Communities Weekly Report (11 September 2020) (Attachment H1). The Department notes that there are no new listings relevant to the proposed action. According to section 158A of the EPBC Act, a decision on whether to approve an action under section 133 is not affected by listing events that happen after a section 75 decision (i.e. controlled action decision) is made.
22. The Department consulted the Species Information and Policy Section (SIPS) regarding the statutory documents. On 18 September 2020, SIPS (Attachment H2) advised that they were not anticipating any changes in the coming six weeks.
23. For the reasons set out in the proposed approval decision brief (Attachment D) and the state assessment report (Attachment C), the Department recommends that you approve the taking of the proposed action for the controlling provisions in section 18 and 18A (listed threatened species and ecological communities), subject to conditions.
24. The Department considers the period of approval to 28 July 2035, as outlined in the approval decision notice (Attachment A), is still a suitable timeframe allowing the proponent to implement the requirements as outlined in the conditions at Attachment A.
25. Under section 133(3) of the EPBC Act you must give a copy of the approval to the person named in the approval notice. Letters are provided at Attachment B for your signature, notifying the proponent and State Minister of your decision.

s. 47F(1)

s. 22(1)(a)(ii)

Director

Project Assessments West Section 2

Environment Assessments West (WA, SA, NT)

Branch

Ph: s. 22(1)(a)(ii)

22 September 2020

s. 22(1)(a)(ii)

Project Assessments West section 2

Ph: s. 22(1)(a)(ii)

**ATTACHMENTS**

[Quality assurance checklist](#)

A: [Final approval decision notice with attached conditions](#)

B: Letters (FOR SIGNATURE)

B1: [Letter to the proponent](#)

B2: [Letter to WA DWER](#)

C: [State assessment report and clearing permit](#)

D: Copy of Proposed Approval Decision Brief

D1: [Signed proposed approval decision brief](#)

D2: [Unsigned proposed approval decision brief with active links](#)

E: [Appeal withdrawal notice](#)

F: Comments on proposed decision

F1: [Response email from the proponent](#)

F2: [Official response letter from WA DWER](#)

F3: [Response email from WA DWER](#)

G: Updated supporting documents from the proponent

G1: [Updated fauna management plan](#)

G2: [Updated revegetation plan](#)

G3: [Updated construction environment management framework](#)

G4: [Phytophthora dieback risk assessment](#)

H: Line area advice and policy documents

H1: [EPBC Species and Communities Update \(11 September 2020\)](#)

H2: [SIPS advice \(18 September 2020\)](#)

I: [Department's Environment Management Plan Guidelines](#)

J: Response to the changed condition

J1: [Response from the proponent](#)

J2: [Response from the WA DWER](#)

To: Kylie Calhoun, Assistant Secretary, Environment Assessments West (WA, SA, NT) Branch  
(for decision)


**Proposed Approval Decision Brief (assessment report) – Vasse Diversion Drain Upgrade,  
Busselton, WA, (EPBC 2017/7932)**

**Suspension of Approval Timeframe Decision Brief (Stop Clock) – Section 132 of the  
EPBC Act**

**Timing:** ASAP as the statutory deadline for a final decision is currently 22 September 2020

**Recommendation/s:**

1. Consider the State Assessment Report and clearing permit at Attachment A1  
**Considered / please discuss**
2. Agree that the recommended decision at Attachment B, and summarised in the table below, reflects your proposed decision.  
**Agreed / Not agreed**
3. Agree to the proposed conditions of approval as set out in Attachment B.  
**Agreed / Not agreed**
4. Sign the letters at Attachment C to consult with the proponent, WA Department of Water and Environmental Regulation (WA DWER) on your proposed decision.  
**Signed / Not signed**
5. Agree to not publish the proposed decision (Attachment B) on the internet for public comment.  
**Agreed / Not agreed**
6. Agree to stop the final decision statutory clock under section 132 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) to seek information about the outcome of the Western Australian approvals process.  
**Agreed / Not agreed**
7. If you agree to 6, also agree to waive all contingent fees payable for the stop clock decision.  
**Agreed / Not agreed**

| Summary of recommendations on each controlling provision:   |                |                           |
|---|----------------|---------------------------|
| Controlling Provisions<br>for the action  | Recommendation |                           |
|   | Approve        | Refuse to Approve         |
| Listed threatened species and communities (ss 18, 18A)  | Approve        |                           |
|    |                |                           |
|   |                | 4 September 2020<br>Date: |
| <b>Kylie Calhoun,<br/>           Assistant Secretary,<br/>           Environment Assessments West (WA, SA, NT) Branch</b> |                |                           |
| <b>Comments:</b>  |                |                           |

### Key Points:

#### Background

1. On 3 May 2017, Water Corporation WA (the proponent) referred the proposal to upgrade the Vasse diversion drain in the City of Busselton, approximately 220km south of Perth, WA (the proposed action).
2. The Vasse diversion drain is a constructed watercourse that runs into the ocean, built between 1920 and 1930 to divert water from the Sabina and Vasse Rivers to protect Busselton and surrounding farmland from flooding. The drain extends approximately 6.3 km from Geographe Bay to the Busselton Golf Course. The aim of the proposed action is to upgrade 6 km of drain infrastructure to meet present flood engineering standards, reducing the risk of failure during a flood event and consequent damage to adjacent properties (Attachment E1).
3. On 9 August 2017, a delegate of the Minister determined the proposed action to be a controlled action with listed threatened species and communities (section 18 and 18A) as the relevant controlling provision. Based on the information available in the referral (Attachment E1), the proposed action was determined likely to have a significant impact on the following species:
  - Western Ringtail Possum (*Pseudocheirus occidentalis*);
  - Baudin's Black Cockatoo (*Calyptorhynchus baudinii*), Forest Red-tailed Black-Cockatoo (*Calyptorhynchus banksii naso*), and Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) (together Black Cockatoos);
  - Carburnup King Spider Orchid (*Caladenia procera*).

4. On 8 June 2018, the proponent submitted a request to vary the proposed action under section 156A(1) of the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) ([Attachment E2](#)). The request sought to modify the project footprint to allow for operational requirements, such as access, and to reduce the amount of habitat clearing reducing the clearing footprint to 4.31 hectares (ha) from 7.88 ha in the original proposal. The variation was accepted on 18 July 2018.
5. On 6 December 2018, the Department received a letter from the WA DWER which formally advised that the project would be assessed under the Western Australian Bilateral Agreement, under Part V Division 2 of the *Environmental Protection Act 1986* (WA). Letters notifying the WA DWER and the proponent, confirming the assessment approach by bilateral agreement were signed by the delegate on 24 May 2019.
6. On 23 March 2020, the proponent submitted documentation ([Attachment G1](#)) to the Department that further reduced the clearing footprint to 2.16 ha from 4.31 ha, further avoiding environmental impacts. As this change was within the referred envelope and involved reductions in the extent of impact with no changes to the nature of the impacts or the matters impacted, the Department considered that no formal variation to the proposal was required.
7. The Department is of the view that the nature and extent of the impacts from the revised proposal on matters of national environmental significance are substantially less compared to the original proposal and the 2018 variation. The table below summarises the changes:

| Design Iteration      | Proposed clearing area (ha) | Proposed infill planting and revegetation(ha) |
|-----------------------|-----------------------------|---|
| Referral (2017)       | 7.88                        | 0   |
| Variation (2018)      | 4.31                        | 0   |
| Revised action (2020) | 2.16                        | 0.55  |

8. The WA DWER issued a draft assessment report on 1 May 2020 on which the Department provided comment on 8 May 2020 ([Attachment F1](#)). The Department received a revised draft assessment report and draft permit conditions on 29 May 2020 addressing the Department's previous comments. On 12 June 2020, the Department provided additional comments on the draft assessment report and draft permit conditions ([Attachment F4](#)).
9. The final State Assessment Report and clearing permit ([Attachment A1](#)) was published for public comment (appeal period under WA legislation) on 3 July 2020 for 21 days.
10. In summary, the State approval allows for the clearing of 2.16 ha of native vegetation (revised action area) which constitutes Western Ringtail Possum habitat and Black Cockatoo foraging habitat while avoiding a known population of the Carburnup King Spider Orchid.
11. The State assessment report considers the impacts of the proposed action on Matters of National Environmental Significance (MNES) and concludes the proposed action will result in residual significant impacts on the EPBC Act listed Western Ringtail Possum which requires offsetting. The offsets include infilling, rehabilitation and revegetation of 10.89 ha of



Western Ringtail Possum habitat within the Vasse Diversion Drain. The report also concludes that residual significant impacts to Black Cockatoos and the Carburnup King Spider Orchid are not likely to occur if the State conditions imposed on the proponent are implemented.

12. The Department and the WA DWER also agreed on the offset proposal (Attachment H1) that was provided by the proponent on 1 May 2020.
13. The Department agrees with the State assessment report (Attachment A1) conclusion that the proposed action is not expected to result in an unacceptable impact on EPBC Act listed species and ecological communities provided the proponent implements the recommended conditions. The Department recommends the conditions at Attachment B that reflect the State conditions while also requiring specific timeframes and measurable outcomes be met. This includes a condition that the proponent comply with and implement the State conditions (**condition 1**).

#### *Status of the WA approvals process*

14. As mentioned above in paragraph 9, the WA DWER published the final State assessment report and clearing permit (Attachment A1) for public comment (appeal) on July 3 2020 and received an appeal. The Department understands that the appeal focused on impacts to the Western Ringtail Possum and the management measures to be adopted through State conditions of approval. The Department also understands that the appeal process is unlikely to result in substantial changes to how the DWER considered MNES under the EPBC Act. Despite this, the Department understands that there is the potential for the conditions of approval included in the State Clearing Permit (CPS 8191/1) to be modified.

#### Stop Clock

15. The Department is committed to reducing regulatory burden on approval holders and avoiding duplication of conditions with the State, especially when the project has been assessed under a bilateral or accredited process.
16. Because of this, the Department is recommending conditions which closely align with the State conditions of approval including the approval of management plans and offset strategies, and to provide oversight on proposed adaptive management measures to mitigate impacts to threatened species and communities.
17. To finalise conditions in this matter, the Department requires confidence that the State conditions of approval (State Clearing Permit (CPS 8191/1)) will not substantially change prior to the EPBC Act approval decision. While the WA appeals process is ongoing, the Department is unable to have this confidence. It is therefore recommended that you stop the clock under section 132 of the EPBC Act to await the issuing of the final State Assessment Report and clearing permit. ✓
18. The proponent has also requested that the Department allow the finalisation of a fauna management plan prior to the final approval. This will facilitate the approvals process and ensure that all plans are approved without the need to seek additional approval by the Post Approval Section. The Stop Clock will therefore also require the proponent to provide a final fauna management plan prior to the clock recommencing.
19. This stop clock approach has been discussed with the proponent over a teleconference on 26 August 2020 and has received their support.

Issues/ Sensitivities

20. There have been two listing status changes since the proponent referred their proposal to the Department in 2017. The following table shows the listing status of species of interest:

| <b>Species</b>                   | <b>Listing status in 2017 (first proposal)</b> | <b>Current listing status</b> | <b>Date on which listing status changed</b> |
|----------------------------------|--|-------------------------------|---|
| Western Ringtail Possum          | Vulnerable                                     | Critically endangered         | 11 May 2018                                 |
| Carbunup King Spider Orchid      | Critically endangered                          | Critically endangered         | No change in listing status                 |
| Baudin's Black Cockatoo          | Vulnerable                                     | Endangered                    | 15 February 2018                            |
| Forest Red-Tailed Black Cockatoo | Vulnerable                                     | Vulnerable                    | No change in listing status                 |
| Carnaby's Black Cockatoo         | Endangered                                     | Endangered                    | No change in listing status                 |

Black Cockatoos

21. As detailed in the Department's legal considerations ([Attachment D](#)) and in the State Assessment Report ([Attachment A1](#)), the Department notes that by varying the action, the proponent has excluded impacts to breeding and potential roosting habitat from the proposed action. Given the linear nature of the proposed foraging habitat to be cleared, the minimal Black Cockatoo activity recorded within the application area and that the area is in degraded to completely degraded condition with tree species not considered preferred foraging habitat, the Department agrees with the State assessment and considers that the proposed clearing is unlikely to have a residual significant impact on Black Cockatoos.

Western Ringtail Possum*Proposed action area*

22. The Recovery Plan for the Western Ringtail Possum ([Attachment I1](#)) notes that the Ludlow-Busselton area has long been known as the last substantial stronghold for the species on the Swan Coastal Plain. The population has been contracting since the 1990s, mostly due to habitat loss and fragmentation from urban development and mining. The recovery plan ([Attachment I1](#)) identifies areas around Busselton as critical habitat on the Swan Coastal Plain.
23. The State assessment report ([Attachment A1](#)) has noted the findings of surveys undertaken in different years for the Western Ringtail Possum which are included in the supporting documentation supplied by the proponent ([Attachment G1](#) at appendices C, D, E and K). The results from the latest targeted assessment for Western Ringtail Possum carried out in 2019 included night survey.

24. The targeted Western Ringtail Possum assessment 2019 (Appendix K at Attachment G1) states that much of the vegetation in the project area consists of Peppermint (*Agonis flexuosa*) forest and woodland, with varying proportion of Marri (*Corymbia calophylla*), Flooded Gum (*Eucalyptus rudis*), Jarrah (*Eucalyptus marginata*), Coojong (*Acacia saligna*), Swamp Banksia (*Banksia littoralis*), Modong (*Melaleuca priessiana*), Saltwater Paperbark (*Melaleuca cuticularis*), Spearwood (*Kunze asp.*), and occasional other tree and tall shrub species.
25. The targeted Western Ringtail Possum assessment 2019 also notes an overall mean possum density of 5.83/ha in the project area.

#### *Impact*

26. The State Assessment Report (Attachment A1) explains that the native vegetation clearing associated with the proposed action is considered to provide significant habitat for Western Ringtail Possum and increases the risk of adverse impacts to the species through:
- i. Clearing of 2.16 ha of significant Western Ringtail Possum habitat suitability class B (effectively the highest quality habitat remaining in the Binningup and Dunsborough area). The targeted Western Ringtail Possum assessment 2019 (Appendix K at Attachment G1) recorded a total of 206 dreys in the broader survey area with mean possum density of 5.83 per ha.
  - ii. Potential displacement of a number of individuals and alteration of the population dynamics of the larger area.
  - iii. Disruption of the fauna corridor as the remnant vegetation of the drainage reserve forms an integral part of the species corridor and serves to link core habitat.

The Department notes that the large number of possums observed are within a broader survey area compared to the smaller clearing footprint where only ten possums were observed.

#### *Avoidance and Mitigation*

27. Supporting documentation from the proponent (Attachment G1) and the State Assessment Report (Attachment A1) note that the proponent has minimised the project footprint by implementing detailed engineering design and has reduced the proposed clearing from 7.88 ha to 2.16 ha. The Department recommends implementation of a condition requiring the proponent to limit clearing to 2.16 ha of Western Ringtail Possum habitat within the development envelope (**condition 1**).
28. The State Assessment Report (Attachment A1) mentions that the proponent will prepare a Construction Environmental Management Framework (CEMF) and a Construction Environmental Management Plan (CEMP) which will incorporate targeted management strategies based on best practice and advice from technical specialists. These plans include Fauna Management Strategies.
29. The proponent provided the Department with the CEMF on 2 July 2020 (Attachment G2). To ensure that appropriate management measures are applied, the Department recommends that the proponent must implement the weed management and soil hygiene management measures as mentioned in the CEMF (**condition 7**).
30. The Department also notes that in accordance with the State approval, any unacceptable direct and indirect impacts to the Western Ringtail Possum will be avoided and adequately

mitigated through conditions 13,14,15 and 16 of the State Clearing Permit CPS 8191/1 (Attachment A1):

- i. The permit holder must engage a qualified fauna handler to inspect the area, including all trees and tree hollows present within 24 hours prior to, and for the duration of the clearing, for the presence of Western Ringtail Possum (condition 13a).
  - ii. Clearing must cease immediately in the specified area where Western Ringtail Possum(s) have been seen/identified until the species has moved on from the specified area to adjoining suitable habitat (condition 13b) and the species must be recorded and reported as per condition 13 (c) of the State Clearing Permit CPS 8191/1.
  - iii. The Permit Holder must install a minimum of six rope bridges in accordance with condition 14 of the State Clearing Permit CPS 8191/1.
  - iv. The Permit Holder must install a minimum of 12 nest boxes suitable for the Western Ringtail Possum in accordance with condition 15 of the State Clearing Permit, CPS 8191/1.
  - v. To mitigate the impact of the clearing of the Western Ringtail Possum habitat, the Permit Holder must undertake infill planting within 0.55 ha of the clearing as mentioned in condition 16 (a) of the State Clearing Permit, CPS 8191/1.
31. The Department recommends the adoption of these State conditions to avoid and mitigate the impacts to the Western Ringtail Possums and their habitat. To ensure that the rope bridges and nest boxes are placed in appropriate locations, the Department recommends that they must be placed in accordance with advice from a suitably qualified ecologist (**condition 2**). To further mitigate the loss of Western Ringtail Possum habitat, the Department recommends that rope bridges and nest boxes not being utilised by Western Ringtail Possum within six months of installation are repositioned in accordance with advice from a suitably qualified ecologist (**condition 2c**).
32. The Department is of the view that additional conditions are required to ensure impacts to Western Ringtail Possums are avoided and mitigated. It is recommended that the proponent implement **condition 3**, and provide written and photographic evidence and records for the location, relocation and endorsed designs of nest boxes and rope bridges. The endorsement must be provided by a suitably qualified ecologist.
33. Despite the above avoidance and mitigation measures, the State Assessment Report (Attachment A1) concludes that offsetting is required to compensate for the residual significant impacts from the clearing of 2.16 ha of Western Ringtail Possum habitat. The Department agrees with this conclusion and notes that the proponent has committed to 0.55 ha of infill planting as a component of the required 10.89 ha revegetation offset.

#### *Offsets*

34. The Department is of the view that the proposed action will result in residual significant impacts to Western Ringtail Possum habitat and offsetting is required in accordance with the EPBC Act Environmental Offsets Policy (2012) (Attachment H3).
35. The State Assessment Report (Attachment A1 and Attachment H2) determined 10.89 ha of revegetation and rehabilitation of native vegetation, in good to very good condition is

required. This will provide suitable habitat for the Western Ringtail Possum. WA DWER has applied an offset credit for the proposed revegetation and infill planting (0.55 ha) mentioned above. The infill plantings are intended to be planted within the proposed clearing area and are viewed as a mitigation measure, and representing the maximum possible within the clearing footprint. The Department agrees with this conclusion.

36. The State Assessment Report ([Attachment A1](#)) notes that the additional 10.34 ha of revegetation and rehabilitation can occur within the broader area surrounding the Vasse Diversion Drain to provide better environmental outcomes for the local environment. This will establish additional Western Ringtail Possum habitat and connecting corridors allowing the individuals present to expand into habitat that are currently extensively cleared. The ecological benefits from the rehabilitation and revegetation will be aided by the installation of the six rope bridges and nest boxes, specifically designed to support the species, to be installed amongst the existing peppermint trees. The Department agrees with these conclusions and notes that the proponent has retained large tracts of native vegetation as part of its avoidance measures ensuring suitable habitat is still present for the Western Ringtail Possums in the area.
37. At the time of the controlled action decision in 2017, the Western Ringtail Possum was listed as vulnerable under the EPBC Act with an annual probability of extinction of 0.2%. The species has since been uplisted to critically endangered (see table at paragraph 14) under the EPBC Act. In accordance with the EPBC Act, the Department is required to consider the species against the listing at the time the controlled action decision was made, which in this circumstance is *vulnerable*.
38. The Department advises that the State based offset proposal ([Attachment H2](#)) has considered Western Ringtail Possum as a "Critically Endangered" species with an annual probability of extinction of 6.8%. When compared to the Department's offset calculation ([Attachment H5](#)), this results in a significant conservation gain. Therefore, the Department considers the amount of offsetting required by the State Assessment Report as meeting the EPBC Act Environmental Offsets Policy (2012) ([Attachment H3](#)), compensating for 100% of the residual impact. The Department recommends the proponent be required to implement **condition 10** ([Attachment B](#)) along with condition 16 and 17 of the State Clearing Permit CPS 8191/1 ([Attachment A1](#)).
39. The Department considers, that should the detailed avoidance and mitigation measures and proposed offset be implemented according to the State Clearing Permit, CPS 8191/1 and Department recommended conditions at Attachment B, that impacts to the Western Ringtail Possum as a result of the proposed action will be acceptable

#### Carbunup King Spider Orchid

##### *Proposed action area*

40. The Recovery Plan for the Carbunup King Spider Orchid ([Attachment I2](#)) notes that the species is known from a linear range of less than 15 km to the south-west of Busselton, where it grows in Jarrah, Marri and Peppermint woodland on alluvial sandy-clay loam flats with *Anigozanthos manglesii* (commonly known as red and green kangaroo paws), and also from a disjunct occurrence some 70 km north near Kemerton.

The Recovery Plan also notes that all known habitat that holds wild populations is critical to the survival of the species and that all populations, including those based on translocation,

are important populations. According to the State Assessment Report (Attachment A1) the proposed action area is considered to provide important habitat for the species.

#### *Impact*

41. The proponent's flora survey report (Appendix Ha of Attachment G1) notes that two populations of the species were found in close proximity (1.9 meters and 1.2 meters) of the survey area boundary (Attachment J1) but outside of the proposed clearing area.
42. The same flora survey report also notes that another confirmed record of the species and an additional unconfirmed orchid specimen are located between 2.5 to 5 metres from the edge of the proposed temporary clearing footprint. The Department notes that the proponent has confirmed that no direct clearing of confirmed records will occur (Attachment G).
43. The Department agrees with the State Assessment Report (Attachment A1) that given the proximity to the confirmed record of Carunup King Spider Orchid and other potential records (Appendix Ha of Attachment G1) within 5 meters of the proposed clearing footprint, the proposed action may have an indirect impact on a known population.

#### *Avoidance and mitigation*

44. The State Assessment Report states the proponent has proposed the following impact minimisation and mitigation measures:

- Construction site access areas have been carefully selected to avoid the known orchid habitat to prevent further fragmentation or deterioration in vegetation condition;
- Rabbit control along the drain, to maintain the integrity of the levees, may have additional positive impacts on the orchid population through reduction in grazing;
- The work being undertaken for this project is considered to be the 'ultimate design' for the asset. It is unlikely that future clearing will occur within the remaining vegetation. This Crown land remains vested with the City of Busselton with a 'Drainage and Conservation' encumbrance;
- Construction will be undertaken between November 2020 to April 2021 during the time of the year when the orchid tubers are dormant;
- Spring surveys to be undertaken by a qualified expert will identify the location and extent of populations and inform the position of fencing to be installed to protect them during construction activities;
- The protected and fenced areas will be clearly indicated in plans and highlighted in daily *tool box* meetings with construction personnel when activities are occurring close to the populations, and
- The proponent's staff will be present on site with regular inspections of the exclusion zones to ensure the avoidance and mitigation measures are being implemented.

45. The State Assessment Report details that the proponent will develop a targeted flora management plan to implement the mentioned avoidance and mitigation measures. The plan will require endorsement by the WA DBCA for subsequent approval by the WA DWER prior to clearing taking place within 10 metres of any individual of the Carunup King Spider Orchid.

46. The proponent has noted ([Attachment G](#)) that should the spring survey find any currently unknown populations within the clearing footprint, these individuals will be translocated to a custodial plant collection at the WA Herbarium. Translocation to custodial collections is an approved action detailed in the species recovery plan ([Attachment I2](#)).
47. The Department recommends the adoption of condition 9 and 10 of the State clearing permit CPS 8191/1 to implement the above detailed avoidance and mitigation measures (**condition 1b** and **5**). In addition, the Department considers that the State required targeted flora survey for Caribunup King Spider Orchid must occur between September and October 2020 (**condition 5a**) and be carried out by a suitably qualified biologist.
48. The State Assessment Report ([Attachment A](#)) notes that in accordance with the species recovery plan ([Attachment I2](#)), the proponent has committed to the translocation to a custodial collection (WA Herbarium) of any orchid specimens that cannot be avoided. The Department considers that any translocation must be undertaken against a plan endorsed by a qualified biologist and recommends implementing **condition 5c** for any individuals found within the clearing area during the survey.
49. The Department considers that should the detailed avoidance and mitigation measures be implemented according to the State Clearing Permit, CPS 8191/1 and Department recommended conditions at [Attachment B](#), impacts to Caribunup King Spider Orchid as a result of the proposed action will be acceptable.

#### *Conclusion*

50. The Office of Compliance (OoC) has been consulted in regard to the environmental record of the person taking the action. Their report is at [Attachment K](#) and notes that the proponent does not have any adverse environmental history.
51. The State Assessment Report ([Attachment A1](#)) concludes that the proposed action is not expected to result in an unacceptable impact on EPBC Act listed species. The Department agrees that the impacts of the proposed action on EPBC Act listed species are likely to be acceptable provided the proponent implements the proposed conditions ([Attachment B](#)).
52. The Department recommends that the proposed action be approved under section 133 of the EPBC Act subject to the proposed conditions. This conclusion was reached having regard to the likely impacts of the proposed action for the purposes of each controlling provision and the relevant social and economic considerations under section 136 and 139 (refer to legal considerations document at [Attachment D](#)). The Department recommends a period of approval ending on 28 July 2035.
53. The Department has considered the Department's EPBC Species and Communities Update (21 August 2020) ([Attachment N](#)) and advice from the Protected Species and Communities Branch (21 July 2020) ([Attachment L](#)). These reports indicate that the recovery plans and conservation advices attached and referred to in this briefing package are the most current versions you are required to consider under the EPBC Act.
54. The Department recommends that you do not publish the proposed decision at [Attachment B](#) for comment by the public, as the proposed action is not contentious. It is also considered that there is no need to consult with Commonwealth Ministers on the draft conditions, however, the State Environment Minister and the proponent will be provided with a draft for comment.

#### Public submissions on assessment documents

Number For Against Not specified 

55. The clearing application was advertised by the WA DWER for public comment from 5 December 2018 to 26 December 2018 (See “planning instruments and other relevant matters” section at Attachment A1). One public submission was received raising concerns regarding revisions to the project footprint, impacts to Western Ringtail Possum, Caribunup King Spider Orchid, *Conospermum caeruleum*.subsp Busselton and the inadequacy of surveys for these species. On 3 January 2019, DWER wrote to the applicant, requesting a response to the public submission. On 13 February 2019 the applicant provided a response to the public submission that the WA DWER and Department found acceptable.

Consultation:

56. Before deciding whether or not to approve the proposed action, a delegate of the Minister is required, under sections 131 and 131AA of the EPBC Act, to consult with the proponent and any other Minister that they believe has administrative responsibilities relating to the proposed action. The Department recommends that you consult with (Attachment C1 and C2):

- Ms Klara Allsop, Senior Advisor – Environmental Approvals, Assets, Planning and Delivery, Western Australia Proponent;
- Mr Mike Rowe, Director General, Western Australian Department of Water and Environmental Regulation; and

57. The Department’s Post Approvals Section and Office of Compliance have been consulted on the proposed conditions. These comments (Attachments M1 and M2), have been considered and included in the proposed conditions of approval at (Attachment B).

s. 47F(1)

s. 22(1)(a)(ii)  
 Director  
 Project Assessments West Section 1  
 Ph: s. 22(1)(a)(ii)  
 1 September 2020

s. 22(1)(a)(ii)  
 Project Assessments West Section 1  
 Ph: s. 22(1)(a)(ii)

**ATTACHMENTS**

A: DWER Assessment report and clearing permit CPS 8191/1

B: Proposed approval decision notice

C: Letters FOR SIGNATURE

C1: Letter to the Proponent FOR SIGNATURE



C2: Letter to the WA DWER FOR SIGNATURE

D: Legal Considerations

E: Referral and variation

E1: Original referral 2017

E2: Request to vary the proposed action 2018

F: Comments on WA DWER's draft assessment report and clearing permit

F1: DWER's first draft of the assessment report with DAWE comment

F2: DWER's second draft assessment report with DAWE comments

F3: DWER's draft clearing permit with DAWE comments

F4: Additional comments on DWER's clearing permit

G: Proponent's supporting documentation

G1: Water Corporation revised Project Plan 2020

G2: Construction Environment Management Framework

H: Offset related documents

H1: Water Corporation offsets proposal

H2: WA DWER calculated offsets

H3: EPBC Act Environment Offsets Policy

H4: Upgraded revegetation plan

H5: DAWE calculated offsets

I: Statutory documents

I1: Recovery Plan for Western Ringtail Possum

I2: Recovery Plan for Carburnup King Spider Orchid

I3: Recovery Plan for Forest Black Cockatoo

I4: Recovery Plan for Carnaby's Cockatoo

I5: Conservation Advice for Western Ringtail Possum

I6: Conservation Advice for Carburnup King Spider Orchid

I7: Conservation Advice for Forest Red-tailed Black Cockatoo

I8: Conservation Advice for Baudin's Cockatoo

I9: Threat abatement plan for predation by Feral Cats

I10: Threat abatement plan for predation by the European Red Fox

**J: Maps and Figures**

J1: Figure showing locations of Caribunup King Spider Orchids

J2: Figure showing the proposed revegetation site

**K: Environmental history check for the proponent from Office of Compliance**

**L: Statutory documents check email from protected species and communication branch**

**M: Comments on the Department's proposed approval decision notice**

M1: Post Approvals section comments

M2: Office of Compliance comments

**N: Species and communities update**



**PROPOSED APPROVAL**

**Vasse Diversion Drain Upgrade, Busselton, Western Australia (EPBC 2017/7932)**

This decision is made under sections 130(1) and 133(1) of the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*. Note that section 134(1A) of the **EPBC Act** applies to this approval, which provides in general terms that if the approval holder authorises another person to undertake any part of the action, the approval holder must take all reasonable steps to ensure that the other person is informed of any conditions attached to this approval, and that the other person complies with any such condition.

**Details**

|   |   |
|---|---|
| <b>Person to whom the approval is granted (approval holder)</b> | Water Corporation WA  |
| <b>ACN or ABN of approval holder</b>                            | ABN: 28003434917  |
| <b>Action</b>   | To upgrade the Vasse diversion drain within the City of Busselton approximately 220 km south of Perth, WA (EPBC 2017/7932) subject to the variation of the action accepted by the Minister under section 156B of the EPBC Act on Wednesday, 18 July 2018. |

**Proposed Approval decision**

My decision on whether or not to approve the taking of the action for the purposes of the controlling provision for the action is as follows.

**Controlling Provisions**

| Listed Threatened Species and Communities |         |
|---|---------|
| Section 18                                | Approve |
| Section 18A                               | Approve |

**Period for which the approval has effect**

This approval has effect until 28 July 2035

**Decision-maker**

|                          |  |
|--------------------------|--|
| <b>Name and position</b> | Kylie Calhoun<br>Assistant Secretary<br>Environment Assessments West (WA, SA, NT) Branch<br>Department of Agriculture, Water and the Environment |
| <b>Signature</b>         | <b>PROPOSED DECISION DO NOT SIGN</b>   |
| <b>Date of decision</b>  | <b>PROPOSED DECISION - DO NOT DATE</b>   |

**Conditions of approval**

This approval is subject to the conditions under the EPBC Act as set out in ANNEXURE A.

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**ANNEXURE A – CONDITIONS OF APPROVAL**

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**Part A – Conditions specific to the action**

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1. To minimise impacts to **EPBC Act listed species**, the approval holder must:
  - a. **clear** no more than 2.16 hectares (ha) of **Western Ringtail Possum habitat** within the **project area** (hatched yellow in Attachment A and Attachment B);
  - b. comply with and implement the conditions of the **clearing permit CPS 8191/1** or as varied from time to time; and
  - c. notify the **Department** in writing of any variations of the conditions of **clearing permit CPS 8191/1** within 10 business days of such a change being approved by the **State Government**.
2. To avoid and mitigate impacts to the **Western Ringtail Possum**, the approval holder must:
  - a. implement condition 14 of the **clearing permit CPS 8191/1** by installing a minimum of six rope bridges. The installation of the rope bridges must be in accordance with advice from a **suitably qualified ecologist**;
  - b. implement condition 15 of the **clearing permit CPS 8191/1** by installing a minimum of 12 nest boxes suitable for **Western Ringtail Possum**. If the **action** results in the removal of more than six **dreys**, the **approval holder** must install two nest boxes for each additional **drey** being removed. Installation of the nest boxes must be in accordance with advice from a **suitably qualified ecologist**; and
  - c. reposition rope bridges and nest boxes in accordance with advice from a **suitably qualified ecologist** if they are not being utilised by **Western Ringtail Possum** within six months of installation.
3. The approval holder must maintain the following records and provide them to the **Department** within two months of the installation or repositioning of rope bridges and nesting boxes:
  - a. the date(s) and the **location** where the rope bridges and nest boxes for **Western Ringtail Possum** (conditioned under 2 and the **clearing permit CPS 8191/1**) were installed or repositioned;
  - b. an in-situ photograph of each rope bridge and nest box installed or repositioned;
  - c. evidence that a **suitably qualified ecologist** has approved the design and placement of each rope bridge and nest box; and
  - d. provide the **Department** with an annual monitoring and maintenance report for the installed and repositioned rope bridges and nest boxes for at least ten years from the date of approval.
4. The approval holder must notify the **Department** within two **business days** if any **Western Ringtail Possum** is killed as a result of the **action**.
5. To minimise impacts to the **Carbunup King Spider Orchid**, the approval holder:
  - a. must implement condition 9 of the **clearing permit CPS 8191/1**. The **targeted flora survey** as required by condition 9 (a) of the **clearing permit CPS 8191/1**, must be conducted between September and October 2020;
  - b. must not **clear** any **Carbunup King Spider Orchid** individuals identified through the **targeted flora survey** required by condition 5a; and
  - c. develop and implement a **translocation proposal** for all **Carbunup King Spider Orchid** individuals identified through the **targeted flora survey** required under condition 5a located within the **clearing area**. This **translocation proposal** must be endorsed in writing by a **suitably qualified biologist** as appropriate to ensure the successful survival of the translocated individuals without posing a risk to the receiving area(s) prior to implementation

- of the proposal. The **translocation proposal** must be implemented once endorsed by a **suitably qualified biologist** as appropriate.
- d. documentary evidence of the endorsement of the **translocation proposal** and implementation of the **translocation proposal** must be provided to the **Department** within 14 business days of the endorsement.
6. Within two months of conducting a **targeted flora survey** for **Carbunup King Spider Orchid** and as required by condition 5a, the approval holder must provide the **Department** with the results of the **targeted flora survey** which must contain the following information:
    - a. the date(s) **targeted flora survey** was conducted and the methodology used; and
    - b. a photograph of each individual of **Carbunup King Spider Orchid** identified during the **targeted flora survey** and map/s showing their **location**.
  7. Prior to the **commencement of the action**, the approval holder must implement the weed management and soil hygiene management measures as mentioned in the **Construction Environmental Management Framework** provided to the **Department** on 2 July 2020.
  8. The approval holder must provide a **fauna management plan** for approval by the **Department** prior to the **commencement of the action**.
  9. The approval holder must implement a **flora management plan** as required by condition 10 of the **clearing permit CPS 8191/1**.
  10. To compensate for the **residual significant impacts** on the **Western Ringtail Possum**, the approval holder must implement condition 17 of the **clearing permit CPS 8191/1**.

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## Part B – Standard administrative conditions

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### Notification of date of commencement of the action

11. The approval holder must notify the **Department** in writing of the date of **commencement of the action** within 10 **business days** after the date of **commencement of the action**.

### Compliance records

12. The approval holder must maintain accurate and complete **compliance records**.
13. If the **Department** makes a request in writing, the approval holder must provide electronic copies of **compliance records** to the **Department** within the timeframe specified in the request.

**Note:** **Compliance records** may be subject to audit by the **Department** or an independent auditor in accordance with section 458 of the **EPBC Act**, and or used to verify compliance with the conditions. Summaries of the result of an audit may be published on the **Department's** website or through the general media.

### Preparation and publication of plans

14. The approval holder must:
  - a. submit **plans** electronically to the **Department** for approval by the **Minister**;
  - b. publish each **plan** on the **website** within 20 **business days** of the date the **plan** is approved by the **Minister** or of the date a revised action management plan is submitted to the **Minister** or the **Department**, unless otherwise agreed to in writing by the **Minister**;
  - c. exclude or redact **sensitive ecological data** from **plans** published on the **website** or provided to a member of the public; and
  - d. keep **plans** published on the **website** until the end date of this approval.

15. The approval holder must ensure that any **monitoring data** (including **sensitive ecological data**), surveys, maps, and other spatial and metadata required under condition 5 of this approval, is prepared in accordance with the **Department's Guidelines for biological survey and mapped data** (2018) and submitted electronically to the **Department**.

#### **Annual compliance reporting**

16. The approval holder must prepare a **compliance report** for each 12 month period following the date of **commencement of the action**, or otherwise in accordance with an annual date that has been agreed to in writing by the **Minister**. The approval holder must:
- publish each **compliance report** on the **website** within 60 **business days** following the relevant 12 month period;
  - notify the **Department** by email that a **compliance report** has been published on the **website** and provide the weblink for the **compliance report** within five **business days** of the date of publication;
  - keep all **compliance reports** publicly available on the **website** until this approval expires;
  - exclude or redact **sensitive ecological data** from **compliance reports** published on the **website**; and
  - where any **sensitive ecological data** has been excluded from the version published, submit the full **compliance report** to the **Department** within 5 **business days** of publication.

**Note:** **Compliance reports** may be published on the **Department's** website.

#### **Reporting non-compliance**

17. The approval holder must notify the **Department** in writing of any: **incident**; non-compliance with the conditions; or non-compliance with the commitments made in **plans**. The notification must be given as soon as practicable, and no later than two **business days** after becoming aware of the **incident** or non-compliance. The notification must specify:
- any condition which is or may be in breach;
  - a short description of the **incident** and/or non-compliance; and
  - the location (including co-ordinates), date, and time of the **incident** and/or non-compliance. In the event the exact information cannot be provided, provide the best information available.
18. The approval holder must provide to the **Department** the details of any **incident** or non-compliance with the conditions or commitments made in **plans** as soon as practicable and no later than 10 **business days** after becoming aware of the **incident** or non-compliance, specifying:
- any corrective action or investigation which the approval holder has already taken or intends to take in the immediate future;
  - the potential impacts of the **incident** or non-compliance; and
  - the method and timing of any remedial action that will be undertaken by the approval holder.

#### **Independent audit**

19. The approval holder must ensure that **independent audits** of compliance with the conditions are conducted as requested in writing by the **Minister**.
20. For each **independent audit**, the approval holder must:
- provide the name and qualifications of the independent auditor and the draft audit criteria to the **Department**;

- b. only commence the **independent audit** once the audit criteria have been approved in writing by the **Department**; and
  - c. submit an audit report to the **Department** within the timeframe specified in the approved audit criteria.
21. The approval holder must publish the audit report on the **website** within 10 **business days** of receiving the **Department's** approval of the audit report and keep the audit report published on the **website** until the end date of this approval.

### Completion of the action

22. Within 30 days after the **completion of the action**, the approval holder must notify the **Department** in writing and provide **completion data**.

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## Part C - Definitions

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In these conditions, except where contrary intention is expressed, the following definitions are used:

**Approval holder** means Western Australian Water Corporation.

**Business day** means a day that is not a Saturday, a Sunday or a public holiday in the state or territory of the action.

**Carbunup King Spider Orchid** means the **EPBC Act** listed critically endangered *Caladenia procera*.

**Clear/Clearing** means the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ringbarking, uprooting or burning of vegetation (but not including weeds – see the *Australian weeds strategy 2017 to 2027* for further guidance, or for the purpose of translocation under condition 5c).

**Cleared area/s** means an area/s (in hectares) within the **project area** where loss or long-term modification of habitat has occurred.

**Clearing area** means the area (in hectares) where loss or long term modification of habitat will occur within the **project area**.

**Clearing permit CPS 8191/1** means the clearing permit granted on 3 July 2020 under section 51E of the *Environmental Protection Act 1986 (WA)*, and any subsequent versions.

**Commencement of the action** means the first instance of any specified activity associated with the action including clearing of vegetation and **construction** of any infrastructure. **Commencement of the action** does not include minor physical disturbance necessary to:

- i. undertake pre-clearance surveys or monitoring programs;
- ii. install signage and /or temporary fencing to prevent unapproved use of the project area;
- iii. protect environmental and property assets from fire, weeds and pests, including **construction** of fencing, and maintenance of existing surface access tracks;
- iv. install temporary site facilities for persons undertaking pre-commencement activities so long as these are located where they have no impact on the **protected matters**.

**Completion data** means an environmental report and spatial data clearly detailing how the conditions of this approval have been met. The **Department's** preferred spatial data format is **shapefile**.

**Completion data** should include, but not be limited to, information detailing the date and location of **clearing**; the actual total **cleared area/s** within the **project area** (in hectares); the total area and type of **Western Ringtail Possum** habitat **cleared** within the **project area** (in hectares); and the total area and type of **Western Ringtail Possum** habitat within **retention area/s** (in hectares). **Completion data** must also include information on the location of rope bridges and nest hollows installed under the conditions of this approval.

**Completion of the action** means all specified activities associated with the action have permanently ceased.

**Compliance records** means all documentation or other material in whatever form required to demonstrate compliance with the conditions of approval in the approval holder's possession or that are within the approval holder's power to obtain lawfully.

**Compliance reports** means written reports:

- i. providing accurate and complete details of compliance, **incidents**, and non-compliance with the conditions and the **plans**;
- ii. consistent with the **Department's Annual Compliance Report Guidelines (2014)**;
- iii. include a **shapefile** of any clearance of any **protected matters**, or their habitat, undertaken within the relevant 12 month period; and
- iv. annexing a schedule of all **plans** prepared and in existence in relation to the conditions during the relevant 12 month period.

**Construction** means the erection of a building or structure that is or is to be fixed to the ground and wholly or partially fabricated on-site; the alteration, maintenance, repair or demolition of any building or structure; preliminary site preparation work which involves breaking of the ground (including pile driving); the laying of pipes and other prefabricated materials in the ground, and any associated excavation work; but excluding the installation of temporary fences and signage.

**Construction Environmental Management Framework** means the document provided by Western Australian Water Corporation to the **Department** on 2 July 2020.

**Department** means the Australian Government's agency responsible for administering the **EPBC Act**.

**Drey** means a nest for the **Western Ringtail Possum** typically formed from a mass of twigs.

**Dieback and weed management methods** mean various methodologies applied to control dieback of Western Australian native vegetation from *Phytophthora* species and multiple **weeds**.

**EPBC Act** means the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*.

**EPBC Act listed species** Threatened fauna and flora listed under Section 178 of the **EPBC Act**.

**Fauna management plan** means a management **plan** for fauna species including **Western Ringtail Possum** occurring within the **project area** prepared by Western Australian Water Corporation.

**Flora management plan** means a management **plan** for flora species including **Carbunup King Spider Orchid** occurring within the **project area** prepared by Western Australian Water Corporation.

**Incident** means any event which has the potential to, or does, impact on one or more **protected matter(s)**.

**Independent audit:** means an audit conducted by an independent and **suitably qualified person** as detailed in the *Environment Protection and Biodiversity Conservation Act 1999 Independent Audit and Audit Report Guidelines (2019)*.

**Life of the approval** means the period for which this approval has effect.

**Location** means the exact position recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA 1994), expressing the geographical co-ordinates in decimal degrees.

**Monitoring data** means the data required to be recorded under the conditions of this approval.

**Minister** means the Australian Government Minister administering the **EPBC Act** including any delegate thereof.



**Plan(s)** means any of the documents required to be prepared, approved by the **Minister**, and/or implemented by the approval holder and published on the **website** in accordance with these conditions (includes action management plans and/or strategies).

**Project area** means all of the areas approved to clear overlain with yellow in Attachmet A and Attachment B and areas subject to conditions overlain with yellow and blue in Attachment C.

**Protected matter** means a matter protected under a controlling provision in Part 3 of the **EPBC Act** for which this approval has effect.

**Residual significant impacts** mean the residual impacts on the protected matters that are still likely to occur after the proposed activities to avoid and mitigate all impacts are taken into account.

**Sensitive ecological data** means data as defined in the Australian Government Department of the Environment (2016) *Sensitive Ecological Data – Access and Management Policy V1.0*.

**Shapefile** means location and attribute information of the action provided in an Esri shapefile format. Shapefiles must contain '.shp', '.shx', '.dbf' files and a '.prj' file that specifies the projection/geographic co-ordinate system used. Shapefiles must also include an '.xml' metadata file that describes the shapefile for discovery and identification purposes.

**State Government** means the Government of Western Australia.

**Suitably qualified biologist** means a person who has professional qualifications and at least three years of work experience surveying for **Carbunup King Spider Orchid** and can give authoritative assessment, advice and analysis on performance relative to the subject matter using relevant protocols, standards, methods and/or literature. If the person does not have appropriate professional qualifications, the person must have at least five years of work experience related to the subject matter and can give authoritative assessment, advice and analysis on performance relative to the subject matter using relevant protocols, standards, methods and/or literature.

**Suitably qualified ecologist** means a person who has professional qualifications and at least three years of work experience surveying for **Western Ringtail Possum** and can give authoritative assessment, advice and analysis on performance relative to the subject matter using relevant protocols, standards, methods and/or literature. If the person does not have appropriate professional qualifications, the person must have at least five years of work experience related to the subject matter and can give authoritative assessment, advice and analysis on performance relative to the subject matter using relevant protocols, standards, methods and/or literature.

**Suitably qualified person** means a person who has professional qualifications, training, skills and/or experience related to the nominated subject matter and can give authoritative independent assessment, advice and analysis on performance relative to the subject matter using the relevant protocols, standards, methods and/or literature.

**Targeted flora survey** means a field-based investigation, including a review of established literature, of the biodiversity of flora and vegetation of the permit area, focusing on habitat suitable for **Carbunup King Spider Orchid** and carried out during the optimal time to identify the species, which is during the flowering period between September and October. Where target flora are identified in the or in close proximity to the permit area, the survey must also include a minimum of a 10 metre radius of the surrounding areas to place the permit area into a local context.

**Translocation proposal** means a written plan that details the deliberate, human-mediated movement of **Carbunup King Spider Orchid** from one area, with a release in another for the purpose of establishing, re-establishing or augmenting a population.

**Website** means a set of related web pages located under a single domain name attributed to the approval holder and available to the public.

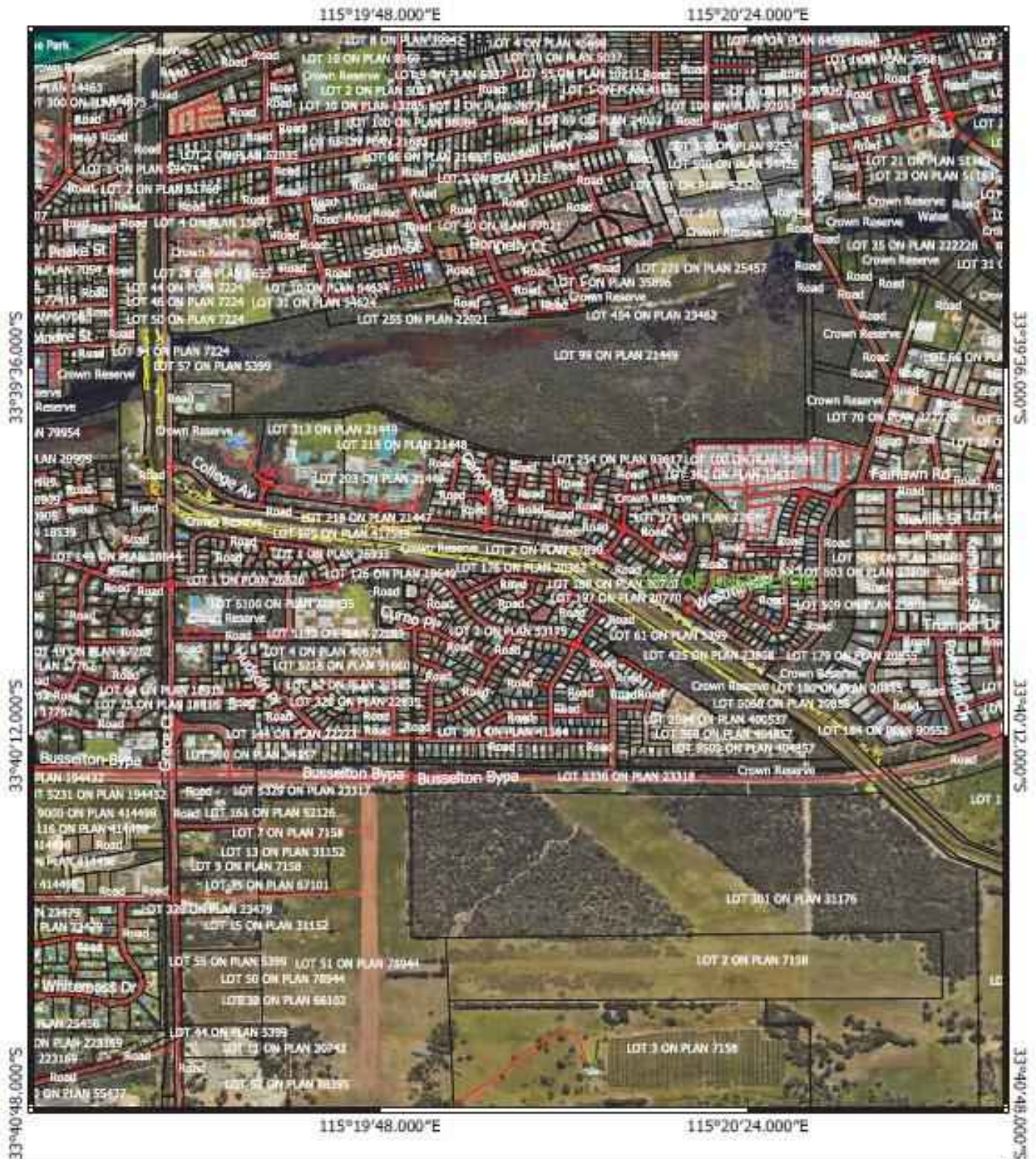
**Weed/s** means any plant species included in the Australian Government Weeds of National Significance or any other species defined as a weed in **clearing permit CPS 8191/1**.

**Western Ringtail Possum** means the **EPBC Act** listed critically endangered species *Pseudocheirus occidentalis*.

**Western Ringtail Possum habitat** means any areas where **Western Ringtail Possum** occurs naturally.

**ATTACHMENTS**

**Attachment A**



Attachment B



**Attachment C**



## CONSIDERATIONS RELATING TO DECISION-MAKING UNDER PART 9 OF THE EPBC ACT

### Vasse Diversion Drain Upgrade, Busselton, WA, (EPBC 2017/7932)

#### Mandatory Considerations

Under s 136 of the EPBC Act, in deciding whether or not to approve an action and what conditions to attach to the approval, the Minister must consider the following, so far as they are not inconsistent with any other requirement of Subdivision B, Division 1 of Part 9 of the EPBC Act:

- a) matters relevant to any matter protected by the controlling provisions.

The proposed action was assessed by the Western Australian Government in accordance with the Bilateral Agreement made under section 45 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) relating to environmental assessment between the Commonwealth of Australia and the State of Western Australia. The assessment process was the Native Vegetation Clearing Process under Part V Division 2 of the *Environment Protection Act 1986* (WA). The State's assessment report is at Attachment A1 of the proposed decision brief.

The Assessment report makes the following conclusions in relation to the matters protected by the controlling provisions:

| Controlling Provision                                 | Relevant Section of Report   | Acceptability of Impacts   |
|---|--|----------------------------|
| Listed threatened species and communities (s18 & 18A) | <p>The Western Australian Assessment Report (<u>Attachment A1</u> of the proposed decision brief) concludes that the proposed action is not expected to result in an unacceptable impact on EPBC Act listed species and ecological communities.</p> <p>The Department agrees with the State's conclusion and considers the impacts of the proposed action area acceptable provided the proponent implements the proposed conditions (<u>Attachment A1</u>) of the proposed decision brief.</p> <p>The proposed clearing is unlikely to impact to an unacceptable level on Western Ringtail Possum (<i>Pseudocheirus occidentalis</i>) (vulnerable at the time of the Section 75 Controlled Action decision, and up listed as Critically Endangered on 11 May 2018) habitat even though 2.16 ha of habitat ranging from completely degraded to very good condition will be cleared. The proponent has avoided clearing 5.72 ha by re-designing the action, mitigating and offsetting the residual impact through revegetation and the installation of, at a minimum, six rope bridges and 12 nest boxes for the species in suitable locations to support their ongoing presence and allow for their dispersal in the area.</p> <p>The Department agrees with the summary in the State</p> | Acceptable with conditions |

|  |  |  |
|--|--|--|
|  | <p>Assessment Report for Carnaby's Black Cockatoo (<i>Calyptorhynchus latirostris</i>) (Endangered), Forest Red-Tailed Black Cockatoo (<i>Calyptorhynchus banksii naso</i>) (Vulnerable), and Baudin's Black Cockatoo (<i>Calyptorhynchus baudinii</i>) (Vulnerable at the time of the Section 75 Controlled Action decision, and up listed as endangered 15 February 2018) that the proposed action will not result in unacceptable impacts to the species. While a small amount of degraded to completely degraded Black Cockatoo foraging habitat is being cleared, the proposed clearing is linear and minimal. The Department also notes that no suitable hollows for Black Cockatoos are being lost as a result of the proposed clearing.</p> <p>As summarised in the State Assessment Report, impacts to Carburnup King Spider Orchid (<i>Caladenia procera</i>) will be acceptable as none will be cleared during the proposed action. A targeted spring survey will be conducted by a suitably qualified biologist during September-October and a flora management plan will be prepared to avoid/minimise impacts to the species. The Department agrees with the State assessment and considers that the impacts to the species is acceptable provided the proponent implements the proposed conditions (<u>Attachment A1</u> of the proposed decision brief).</p> |  |
|--|--|--|

The Department agrees with the above conclusions in relation to the potential impacts to the following matters.

b) economic and social matters.

Following are the information on economic and social matters which was obtained from the State Assessment Report (Attachment A1) and Water Corporation supporting document (Attachment G1):

- The Water Corporation supporting documentation (Attachment G1) mentions that failure to develop the project may result in the loss of life and will result in damage to property in the event of a 1 in 100 annual exceedance probability storm.
- The assessment of the financial damages associated with failure of the drain has an annualised present value of AUD 18.9 million.
- The expected total cost of the project is estimated at AUD 20.2 million.
- Given the significant project budget, the proponent envisages that there will be multiple job opportunities, particularly in construction.
- Water Corporation supporting documentation notes that they sent out letters and emails to over 350 properties along the drain providing a description of the proposal and inviting comments. The documentation also mentions consultation with over 100 Busselton community members and six representatives of local environmental stakeholder groups in December 2019. The proponent claims that many people are happy to see improvements in flood protection for Busselton.

- The documentation ([Attachment G1](#)) notes that people shared their concerns about the project with the proponent. The documentation mentions that the community feedback has been considered and incorporated into the design, surveys and rehabilitation plans.

### Factors to be taken into account

In considering the above matters, the Minister must take into account:

- c) the principles of ecologically sustainable development (set out in section 3A of the EPBC Act) and the precautionary principle (set out in section 391(2) of the EPBC Act):
- The Department has taken into account both long-term and short-term economic, environmental, social and equity considerations. The Department notes the studies undertaken to identify the risk to the EPBC listed threatened species and ecological communities provided in the assessment documentation. Conditions have been recommended to manage impacts to matters of national environmental significance (MNES) where necessary.
  - With the above in mind, including the proposed conditions of approval ([Attachment B](#) of the proposed decision brief), the Department is satisfied that the proposed action conforms to the principle of intergenerational equity, and the conservation of biological and ecological diversity.
- d) the assessment report relating to the action;
- See the Western Australian Clearing Permit and Assessment Reports ([Attachments A1](#) in the proposed approval brief).
- e) any other information the Minister has on the relevant impacts of the action; and
- The Western Australian Office of the Appeals Convener Minister's Appeal Determination and the Report to the Western Australian Minister for the Environment to be provided before the final decision.
- f) any relevant comments given to the Minister by another Minister in accordance with an invitation under section 131 or 131AA and 131A.
- Letters inviting comments from the WA DWER, WA Department of Biodiversity, Conservation and Attractions (WA DBCA) and the proponent on the proposed approval are at [Attachments C1, C2 and C2](#) of the proposed decision brief for your signature. You need to consider any comments received in making your final approval decision.
- g) any information given to the Minister in accordance with a request for further information under section 132.
- No further information has been requested under section 132.
- h) Requirements for decisions about listed threatened species and communities – section 139

In deciding whether or not to approve for the purposes of a subsection of section 18 or section 18A the taking of an action, and what conditions to attach to such an approval, the Minister must not act inconsistently with:

- (a) Australia's obligations under:



- (i) the Biodiversity Convention; or
- (ii) the Apia Convention; or
- (iii) CITES; or

(b) a recovery plan or threat abatement plan.

(2) If:

(a) the Minister is considering whether to approve, for the purposes of a subsection of section 18 or section 18A, the taking of an action; and

(b) the action has or will have, or is likely to have, a significant impact on a particular listed threatened species or a particular listed threatened ecological community;

the Minister must, in deciding whether to so approve the taking of the action, have regard to any approved conservation advice for the species or community.

#### The Biodiversity Convention

The Biodiversity Convention is available at:

<http://www.austlii.edu.au/au/other/dfat/treaties/ATS/1993/32.html>

The objectives of the Biodiversity Convention, to be pursued in accordance with its relevant provisions, are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding.

#### Consideration

The recommendations of the Western Australian Assessment Report are considered by the Department to be consistent with the Biodiversity Convention, which promotes environmental impact assessment (such as this process) to avoid and minimise adverse impacts on biological diversity. The Department has also given particular consideration to an appropriate combination of avoidance and mitigation measures for the management of species potentially impacted by the proposed action.

#### Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

CITES is available at: <http://www.austlii.edu.au/au/other/dfat/treaties/ATS/1976/29.html>

CITES is an international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival.

#### Consideration

The recommendations of the Assessment Report are not inconsistent with CITES as the proposed action does not involve international trade.

#### Convention on the Conservation of Nature in the South Pacific (APIA Convention)

The APIA Convention is available at:

<http://www.austlii.edu.au/au/other/dfat/treaties/ATS/1990/41.html>

The APIA Convention encourages the creation of protected areas which together with existing protected areas will safeguard representative samples of the natural ecosystems occurring therein (particular attention being given to endangered species), as well as superlative scenery, striking geological formations, and regions and objects of aesthetic interest or historic, cultural or scientific value.

### Consideration

The APIA Convention was suspended with effect from 13 September 2006. While this Convention has been suspended, Australia's obligations under the Convention have been taken into consideration. The recommendations of the Assessment Report are not inconsistent with the Convention which has the general aims of conservation of biodiversity.

### Recovery Plans and Threat Abatement Plans

The Recovery Plans relevant to the proposed action and assessment are:

- Department of Environment and Conservation (2011). *Caladenia procera Interim recovery Plan 2011-2016. Interim Recovery Plan No. 316*. Department of Environment and Conservation, Western Australia. Available from: <http://www.environment.gov.au/biodiversity/threatened/recovery-plans/carbunup-king-spider-orchid-caladenia-procera-recovery-plan-2011>
- Department of Parks and Wildlife (2017). *Western Ringtail Possum (Pseudocheirus occidentalis) Recovery Plan*. Wildlife Management Program No. 58. Department of Parks and Wildlife, Perth, WA. Available from: <http://www.environment.gov.au/biodiversity/threatened/publications/recovery/western-ringtail-possum-recovery-plan>
- Chapman, T (2008). *Forest Black Cockatoo (Baudin's Cockatoo Calyptorhynchus baudinii and Forest Redtailed Black Cockatoo Calyptorhynchus banksii naso) Recovery Plan*. Western Australia: Department of Environment and Conservation. Available from: <http://www.environment.gov.au/resource/forest-black-cockatoo-baudin%E2%80%99s-cockatoo-calyptorhynchus-baudinii-and-forest-red-tailed>
- Department of Parks and Wildlife (2013). *Carnaby's Cockatoo (Calyptorhynchus latirostris) Recovery Plan*. Western Australia: Department of Parks and Wildlife. Available from: <http://www.environment.gov.au/resource/carnaby%E2%80%99s-cockatoo-calyptorhynchus-latirostris-recovery-plan>

These Recovery Plans are provided at Attachments I1, I2, I3 and I4 of the proposed approval brief.

The Threat Abatement Plans relevant to the proposed action are:

- Department of the Environment (2015). *Threat abatement plan for predation by feral cats*. Canberra, ACT: Commonwealth of Australia. Available from: <http://www.environment.gov.au/biodiversity/threatened/publications/tap/threat-abatement-plan-feral-cats>
- Department of the Environment, Water, Heritage and the Arts (DEWHA) (2008). *Threat abatement plan for predation by the European red fox*. DEWHA, Canberra. Available from:

<http://www.environment.gov.au/biodiversity/threatened/publications/tap/predation-european-red-fox>

These Threat Abatement Plans are provided at Attachments I9 and I10 of the proposed approval brief.

### Consideration

The Department has considered all relevant Recovery Plans and Threat Abatement Plans and is of the view that approval of this action would not be inconsistent with the above obligations as:

- The proposed conditions ensure the potential impacts are reduced through avoidance and mitigation measures and residual impacts will be addressed through offsets that include rehabilitation and revegetation of habitat suitable for MNES impacted by the proposed action;
- the action will not result in the species area of occupancy declining, a decrease in the number of listed threatened flora and fauna, or cause any of the recovery objectives to not be met.

### Conservation Advice

The approved conservation advices relevant to this proposed action are:

- Department of the Environment, Water, Heritage and the Arts (2008). Approved Conservation Advice for *Caladenia procera* (Carbunup King Spider Orchid). Canberra: Department of the Environment, Water, Heritage and the Arts. Available from: <http://www.environment.gov.au/biodiversity/threatened/species/pubs/68679-conservation-advice.pdf>
- Threatened Species Scientific Committee (2018). Conservation Advice *Pseudocheirus occidentalis* (Western ringtail possum). Canberra: Department of the Environment and Energy. Available from: <http://www.environment.gov.au/biodiversity/threatened/species/pubs/25911-conservation-advice-11052018.pdf>
- Threatened Species Scientific Committee (2018). Conservation Advice *Calyptorhynchus baudinii* (Baudin's cockatoo). Canberra: Department of the Environment and Energy. Available from: <http://www.environment.gov.au/biodiversity/threatened/species/pubs/769-conservation-advice-15022018.pdf>
- Department of the Environment, Water, Heritage and the Arts (2009). Approved Conservation Advice for *Calyptorhynchus banksii naso* (Forest Red-tailed Black Cockatoo). Canberra: Department of the Environment, Water, Heritage and the Arts. Available from: <http://www.environment.gov.au/biodiversity/threatened/species/pubs/67034-conservation-advice.pdf>

These Threat Abatement Plans are provided at Attachments I5, I6, I7 and I8 of the

### Consideration

The Department has had regard to the approved conservation advice relevant to the proposed action and has given consideration to the likely impacts of the proposed action on listed threatened species and ecological communities. The proposed approval conditions (Attachment B of the proposed decision brief) will reduce habitat loss, disturbance and modification and ensure that activities do not have a significant impact on MNES.

i) Bioregional plans – section 176(5)

In accordance with section 176(5), the Minister is required to have regard to a bioregional plan in making any decision under the Act to which the plan is relevant.

The proposed action is not located within or near an area designated by a bioregional plan. The Department considers that there are no bioregional plans relevant to the proposed action.

j) Person's environmental history

In accordance with section 136(4) the Minister may also consider whether the person proposing to take the action is a suitable person to be granted an approval, having regard to the person's history in relation to environmental matters and if the person is a body corporate, the history of its executive officers and if relevant, the history of the parent company and its executive officers in relation to environmental matters.

- The Department is not aware of any adverse environmental history associated with the proponent (Attachment K), and therefore has no reason to believe the proponent will be unwilling or unable to comply with the proposed conditions of approval.

**Minister not to consider other matters**

In deciding whether or not to approve the taking of an action, and what conditions to attach to an approval, the Minister must not consider any matters that the Minister is not required or permitted, by Subdivision B, Division 1, Part 9 of the EPBC Act, to consider.

**Considerations in deciding on condition**

In accordance with section 134(4), in deciding whether to attach a condition to an approval, the Minister must consider the following:

- a) any relevant conditions that have been imposed, or the Minister considers are likely to be imposed, under a law of a State or self-governing territory or another law of the Commonwealth on the taking of the action;
  - Conditions imposed/likely to be imposed by WA Minister for Environment and Disability Services at Attachment A1 of the proposed approval brief.
- b) information provided by the person proposing to take the action or by the designated proponent of the action;
  - Documentation provided by the person taking the action/ designated proponent is at Attachment E1, E2, G1, G2, H1 and H4 of the proposed approval brief.
- c) the desirability of ensuring as far as practicable that the condition is a cost-effective means for the Commonwealth and the person taking the action to achieve the object of the condition.

- The conditions are derived from those in the Western Australian Government's Clearing Permit CPS 8191/1 (Attachment A1). The Department considers that the conditions are practicable and cost-effective means for achieving the purpose.

#### Consideration of Condition-setting Policy

The Department has considered the likely scope and severity of the impacts to MNES, and the proposed avoidance and mitigation measures, and determined that it is likely the proposed action will result in a significant residual adverse impact on Western Ringtail Possum. The Department has also considered the conditions imposed or likely to be imposed by WA DWER, as described in Clearing Permit CPS 8191/1 (Attachment A1). The Department considers that the likely impacts of the proposed action on EPBC Act listed species and ecological communities will be acceptable, provided the proposed action is undertaken in accordance with the proposed conditions (Attachment B of the proposed decision brief) and consistent with the avoidance, mitigation and offset measures proposed by the proponent. The Department has recommended the implementation of additional conditions in the proposed decision (Attachment B of the proposed decision brief) to ensure that impacts to EPBC Act listed species and ecological communities are minimised to an acceptable level.

Accordingly, the Department considers that it is necessary and convenient to apply approval conditions to this project, as outlined in Attachment B. In applying this analysis, the Department has had regard to the EPBC Act Condition-setting Policy (2015).













































































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### Offsets Assessment Guide

For use in determining offsets under the *Environment Protection and Biodiversity Conservation Act 1999*  
2 October 2012  
This guide relies on Macros being enabled in your browser.

| Matter of National Environmental Significance                          |                         |
|--|-------------------------|
| Name   | Western Ringtail Possum |
| EPBC Act status  | Critically Endangered   |
| Annual probability of extinction<br>Based on IUCN category definitions | 6.8%                    |

| Key to Cell Colours         |
|-----------------------------|
| User input required         |
| Drop-down list              |
| Calculated output           |
| Not applicable to attribute |

| Impact calculator  |                             |                            |                         |      |                   |  |
|--|-----------------------------|----------------------------|-------------------------|------|-------------------|--|
| Protected matter attributes  | Attribute relevant to case? | Description                | Quantum of impact       |      | Units             | Information source   |
| <i>Ecological communities</i>  |                             |                            |                         |      |                   |  |
| Area of community  | No                          |                            | Area                    |      |                   |  |
|  |                             |                            | Quality                 |      |                   |  |
|  |                             |                            | Total quantum of impact | 0.00 |                   |  |
| <i>Threatened species habitat</i>  |                             |                            |                         |      |                   |  |
| Area of habitat  | Yes                         | Good condition WRP habitat | Area                    | 2.16 | Hectares          | Surey reports, DBCA data and applicants supporting information |
|  |                             |                            | Quality                 | 4    | Scale 0-10        |  |
|  |                             |                            | Total quantum of impact | 0.86 | Adjusted hectares |  |
| Protected matter attributes  | Attribute relevant to case? | Description                | Quantum of impact       |      | Units             | Information source   |
| Number of features<br>e.g. Nest hollows, habitat trees                       | No                          |                            |                         |      |                   |  |
| Condition of habitat<br>Change in habitat condition, but no change in extent | No                          |                            |                         |      |                   |  |
| <i>Threatened species</i>  |                             |                            |                         |      |                   |  |
| Birth rate<br>e.g. Change in nest success                                    | No                          |                            |                         |      |                   |  |
| Mortality rate<br>e.g. Change in number of road kills per year               | No                          |                            |                         |      |                   |  |
| Number of individuals<br>e.g. Individual plants/animals                      | No                          |                            |                         |      |                   |  |

| Offset calculator  |                             |                         |                   |   |   |                               |   |   |   |                          |   |                                       |                    |  |                 |                    |      |       |    |  |
|--|-----------------------------|-------------------------|-------------------|---|---|-------------------------------|---|---|---|--------------------------|---|---------------------------------------|--------------------|--|-----------------|--------------------|------|-------|----|--|
| Protected matter attributes  | Attribute relevant to case? | Total quantum of impact | Units             | Proposed offset                         | Time horizon (years)                            | Start area and quality        | Future area and quality without offset  | Future area and quality with offset   | Raw gain  | Confidence in result (%) | Adjusted gain   | Net present value (adjusted hectares) | % of impact offset | Minimum (90%) direct offset requirement met? | Cost (\$ total) | Information source |      |       |    |  |
| <i>Ecological Communities</i>  |                             |                         |                   |   |   |                               |   |   |   |                          |   |                                       |                    |  |                 |                    |      |       |    |  |
| Area of community  | No                          |                         |                   |   | Risk-related time horizon (max. 20 years)       | Start area (hectares)         | Risk of loss (%) without offset<br>Future area without offset (adjusted hectares) | Risk of loss (%) with offset<br>Future area with offset (adjusted hectares) |   |                          |   |                                       |                    |  |                 |                    |      |       |    |  |
|  |                             |                         |                   |   | Time until ecological benefit                   | Start quality (scale of 0-10) | Future quality without offset (scale of 0-10)                                     | Future quality with offset (scale of 0-10)                                  |   |                          |   |                                       |                    |  |                 |                    |      |       |    |  |
|  |                             |                         |                   |   |   |                               |   |   |   |                          |   |                                       |                    |  |                 |                    |      |       |    |  |
| <i>Threatened species habitat</i>  |                             |                         |                   |   |   |                               |   |   |   |                          |   |                                       |                    |  |                 |                    |      |       |    |  |
| Area of habitat  | Yes                         | 0.86                    | Adjusted hectares | Onsite revegetation and infill planting | Time over which loss is averted (max. 20 years) | 20                            | Start area (hectares)   | 0.55  | Risk of loss (%) without offset<br>Future area without offset (adjusted hectares) | 30%                      | Risk of loss (%) with offset<br>Future area with offset (adjusted hectares) | 10%                                   | 0.11               | 90%  | 0.10            | 0.03               | 0.05 | 6.15% | No |  |
|  |                             |                         |                   |   | Time until ecological benefit                   | 10                            | Start quality (scale of 0-10)   | 0   | Future quality without offset (scale of 0-10)                                     | 1                        | Future quality with offset (scale of 0-10)                                  | 5                                     | 4.00               | 50%  | 2.00            | 1.04               |      |       |    |  |
|  |                             |                         |                   |   |   |                               |   |   |   |                          |   |                                       |                    |  |                 |                    |      |       |    |  |
| Protected matter attributes  | Attribute relevant to case? | Total quantum of impact | Units             | Proposed offset                         | Time horizon (years)                            | Start value                   | Future value without offset   | Future value with offset  | Raw gain  | Confidence in result (%) | Adjusted gain   | Net present value                     | % of impact offset | Minimum (90%) direct offset requirement met? | Cost (\$ total) | Information source |      |       |    |  |
| Number of features<br>e.g. Nest hollows, habitat trees                       | No                          |                         |                   |   |   |                               |   |   |   |                          |   |                                       |                    |  |                 |                    |      |       |    |  |
| Condition of habitat<br>Change in habitat condition, but no change in extent | No                          |                         |                   |   |   |                               |   |   |   |                          |   |                                       |                    |  |                 |                    |      |       |    |  |
| <i>Threatened species</i>  |                             |                         |                   |   |   |                               |   |   |   |                          |   |                                       |                    |  |                 |                    |      |       |    |  |
| Birth rate<br>e.g. Change in nest success                                    | No                          |                         |                   |   |   |                               |   |   |   |                          |   |                                       |                    |  |                 |                    |      |       |    |  |
| Mortality rate<br>e.g. Change in number of road kills per year               | No                          |                         |                   |   |   |                               |   |   |   |                          |   |                                       |                    |  |                 |                    |      |       |    |  |
| Number of individuals<br>e.g. Individual plants/animals                      | No                          |                         |                   |   |   |                               |   |   |   |                          |   |                                       |                    |  |                 |                    |      |       |    |  |

# Offsets Assessment Guide

For use in determining offsets under the Environment Protection and Biodiversity Conservation Act 1999  
2 October 2012

This guide relies on Macros being enabled in your browser.

| Matter of National Environmental Significance                          |                         |
|--|-------------------------|
| Name   | Western Ringtail Possum |
| EPBC Act status  | Vulnerable              |
| Annual probability of extinction<br>Based on IUCN category definitions | 0.2%                    |

| Key to Cell Colours         |
|-----------------------------|
| User input required         |
| Drop-down list              |
| Calculated output           |
| Not applicable to attribute |

| Impact calculator  |                             |                                 |                         |      |                   |   |
|--|-----------------------------|---------------------------------|-------------------------|------|-------------------|---|
| Protected matter attributes  | Attribute relevant to case? | Description                     | Quantum of impact       |      | Units             | Information source                            |
| <i>Ecological communities</i>  |                             |                                 |                         |      |                   |   |
| Area of community  | No                          |                                 | Area                    |      |                   |   |
|  |                             |                                 | Quality                 |      |                   |   |
|  |                             |                                 | Total quantum of impact | 0.00 |                   |   |
| <i>Threatened species habitat</i>  |                             |                                 |                         |      |                   |   |
| Area of habitat  | Yes                         | Western Ringtail Possum habitat | Area                    | 2.16 | Hectares          | DWER and WC information supported by Surveys. |
|  |                             |                                 | Quality                 | 7    | Scale 0-10        |   |
|  |                             |                                 | Total quantum of impact | 1.51 | Adjusted hectares |   |
| <i>Threatened species</i>  |                             |                                 |                         |      |                   |   |
| Protected matter attributes  | Attribute relevant to case? | Description                     | Quantum of impact       |      | Units             | Information source                            |
| Number of features<br>e.g. Nest hollows, habitat trees                       | No                          |                                 |                         |      |                   |   |
| Condition of habitat<br>Change in habitat condition, but no change in extent | No                          |                                 |                         |      |                   |   |
| Birth rate<br>e.g. Change in nest success                                    | No                          |                                 |                         |      |                   |   |
| Mortality rate<br>e.g. Change in number of road kills per year               | No                          |                                 |                         |      |                   |   |
| Number of individuals<br>e.g. Individual plants/animals                      | No                          |                                 |                         |      |                   |   |

| Offset calculator  |                             |                         |                   |  |   |    |                        |       |  |     |   |      |          |                          |               |                                       |                    |  |                 |                    |
|--|-----------------------------|-------------------------|-------------------|--|---|----|------------------------|-------|--|-----|---|------|----------|--------------------------|---------------|---------------------------------------|--------------------|--|-----------------|--------------------|
| Protected matter attributes  | Attribute relevant to case? | Total quantum of impact | Units             | Proposed offset  | Time horizon (years)                            |    | Start area and quality |       | Future area and quality without offset         |     | Future area and quality with offset         |      | Raw gain | Confidence in result (%) | Adjusted gain | Net present value (adjusted hectares) | % of impact offset | Minimum (90%) direct offset requirement met? | Cost (\$ total) | Information source |
| <i>Ecological Communities</i>  |                             |                         |                   |  |   |    |                        |       |  |     |   |      |          |                          |               |                                       |                    |  |                 |                    |
| Area of community  | No                          |                         |                   |  | Risk-related time horizon (max. 20 years)       |    | Start area (hectares)  |       | Risk of loss (%) without offset                |     | Risk of loss (%) with offset                |      | Raw gain | Confidence in result (%) | Adjusted gain | Net present value (adjusted hectares) | % of impact offset | Minimum (90%) direct offset requirement met? | Cost (\$ total) | Information source |
|  |                             |                         |                   |  |   |    |                        |       | Future area without offset (adjusted hectares) | 0.0 | Future area with offset (adjusted hectares) | 0.0  |          |                          |               |                                       |                    |  |                 |                    |
|  |                             |                         |                   |  |   |    |                        |       | Time until ecological benefit                  |     | Start quality (scale of 0-10)               |      |          |                          |               |                                       |                    |  |                 |                    |
| <i>Threatened species habitat</i>  |                             |                         |                   |  |   |    |                        |       |  |     |   |      |          |                          |               |                                       |                    |  |                 |                    |
| Area of habitat  | Yes                         | 1.51                    | Adjusted hectares | Revegetation and infill planting adjacent to habitat being impacted. | Time over which loss is averted (max. 20 years) | 20 | Start area (hectares)  | 10.89 | Risk of loss (%) without offset                | 15% | Risk of loss (%) with offset                | 5%   | Raw gain | Confidence in result (%) | Adjusted gain | Net present value (adjusted hectares) | % of impact offset | Minimum (90%) direct offset requirement met? | Cost (\$ total) | Information source |
|  |                             |                         |                   |  |   |    |                        |       | Future area without offset (adjusted hectares) | 9.3 | Future area with offset (adjusted hectares) | 10.3 |          |                          |               |                                       |                    |  |                 |                    |
|  |                             |                         |                   |  |   |    |                        |       | Time until ecological benefit                  | 10  | Start quality (scale of 0-10)               | 2    |          |                          |               |                                       |                    |  |                 |                    |
| <i>Threatened species</i>  |                             |                         |                   |  |   |    |                        |       |  |     |   |      |          |                          |               |                                       |                    |  |                 |                    |
| Protected matter attributes  | Attribute relevant to case? | Total quantum of impact | Units             | Proposed offset  | Time horizon (years)                            |    | Start value            |       | Future value without offset                    |     | Future value with offset                    |      | Raw gain | Confidence in result (%) | Adjusted gain | Net present value                     | % of impact offset | Minimum (90%) direct offset requirement met? | Cost (\$ total) | Information source |
| Number of features<br>e.g. Nest hollows, habitat trees                       | No                          |                         |                   |  |   |    |                        |       |  |     |   |      |          |                          |               |                                       |                    |  |                 |                    |
| Condition of habitat<br>Change in habitat condition, but no change in extent | No                          |                         |                   |  |   |    |                        |       |  |     |   |      |          |                          |               |                                       |                    |  |                 |                    |
| Birth rate<br>e.g. Change in nest success                                    | No                          |                         |                   |  |   |    |                        |       |  |     |   |      |          |                          |               |                                       |                    |  |                 |                    |
| Mortality rate<br>e.g. Change in number of road kills per year               | No                          |                         |                   |  |   |    |                        |       |  |     |   |      |          |                          |               |                                       |                    |  |                 |                    |
| Number of individuals<br>e.g. Individual plants/animals                      | No                          |                         |                   |  |   |    |                        |       |  |     |   |      |          |                          |               |                                       |                    |  |                 |                    |

| Summary                     |                   |                             |                    |                         |                    |                                  |               |
|-----------------------------|-------------------|-----------------------------|--------------------|-------------------------|--------------------|----------------------------------|---------------|
| Protected matter attributes | Quantum of impact | Net present value of offset | % of impact offset | Direct offset adequate? | Cost (\$)          |                                  |               |
|                             |                   |                             |                    |                         | Direct offset (\$) | Other compensatory measures (\$) | Total (\$)    |
| Birth rate                  | 0                 |                             |                    |                         | \$0.00             |                                  | \$0.00        |
| Mortality rate              | 0                 |                             |                    |                         | \$0.00             |                                  | \$0.00        |
| Number of individuals       | 0                 |                             |                    |                         | \$0.00             |                                  | \$0.00        |
| Number of features          | 0                 |                             |                    |                         | \$0.00             |                                  | \$0.00        |
| Condition of habitat        | 0                 |                             |                    |                         | \$0.00             |                                  | \$0.00        |
| Area of habitat             | 1.512             | 2.11                        | 139.84%            | Yes                     | \$0.00             | N/A                              | \$0.00        |
| Area of community           | 0                 |                             |                    |                         | \$0.00             |                                  | \$0.00        |
|                             |                   |                             |                    |                         | <b>\$0.00</b>      | <b>\$0.00</b>                    | <b>\$0.00</b> |



















s. 22(1)(a)(ii)

s. 22(1)(a)(ii)

**From:** Klara Allsopp <Klara.Allsopp@watercorporation.com.au>

**Sent:** Tuesday, 21 April 2020 7:51 PM

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**Cc:** Bree Atkinson <Bree.Atkinson@watercorporation.com.au>; Louis Tang <Louis.Tang@watercorporation.com.au>

**Subject:** 2017/7932, CPS 8191/1, CD00116 - Vasse Diversion Drain Upgrade Offset/Mitigation Plan

Good Evening Everyone,

Thank you for taking the time to meet and discuss the Vasse Diversion Drain Upgrade project yesterday. As agreed, we have reconfigured the mitigation/offset information proposed for the project, to provide more clarity.

### Summary of Current Mitigation/Offset proposal

The Corporation is proposing to revegetate a total of 7ha within and adjacent to the current proposed construction corridor. The 7ha is a mix of infill planting in existing vegetated areas and complete revegetation of areas completely devoid of vegetation (either cleared as part of this proposal or previously cleared), the . Tranen has been engaged to prepare a revegetation Management plan with a draft due on the 29/04/2020

| Project Footprint<br>34.7 ha | Total Clearing Native Vegetation Clearing<br>2.16 | Infill (weed, reveg, bridges, boxes) |  | Rehabilitation (weed, seeding, planting (mix of seedlings and semi-mature) |  |
|------------------------------|---|--------------------------------------|--|--|--|
|                              |   | Within the project Footprint         | Offset (outside the project footprint) | Within the project footprint   | Offset (Outside the project footprint) |
|                              |   | 0.03 ha                              | 3.45 ha                                | 0.78 ha  | 2.74 ha                                |
|                              |   | 3.48 ha                              |  | 3.52 ha  |  |
|                              |   | 7 ha                                 |  |  |  |

### Description of Infill Works

Infill planting will be undertaken to enhance and improve foraging capacity of existing bushland adjacent to the drain.

- Infill planting will involve improvement of under and middle story species and potential planting of semi-mature plants to fill gaps in the canopy (as advised by the consultant)
- Strategic installation of rope bridges (with advice from Mike Bamford and Roberta Bencini)
- Strategic installation of nest-boxes (with advice from Mike Bamford and Roberta Bencini)
- Weed management

The Corporation proposes to commence infill planting works prior to commencement of construction, in late Winter/Spring 2020.

### Description of Rehabilitation works

Rehabilitation will be undertaken on areas of bare earth

- Species selection based on the PEC and possum-preferred species, which includes Peppermint trees, Marri and Flooded gum.

- Soil preparation
- Weed management

Weed management will be undertaken progressively as the construction fronts progress. The bulk of the rehabilitation works will be undertaken in Winter/Spring 2020.

#### Other proposed mitigation

- Prof Kingsley Dixon will undertake a custodial collection from the *C. procera* adjacent to the project area.
- The Geographe Landcare Nursery is propagating 300 *Conospermum caeruleum* (local hybrid variety) for use in both the infill planting and rehabilitation planting.
- A relocation plan is being prepared for the Carter's Freshwater Mussel. IndoPacific has been liaising with Kim Williams (Regional Leader Nature Conservation) on behalf of the Corporation to prepare this plan.
- Geographe Landcare Nursery will undertake salvage of plants prior to clearing, to contribute to local provenance and parent plants for propagation.

#### Attached

- CD00116\_InfillRehab\_20200421 – four .shp files reflecting the third line in the table above.
- PossumDataWithinDevFootprint\_20200421 – an intersect of Mike Bamfords Survey report data with the final development footprint, [explained below](#).

| Description                     | .shp File Name                                  | Intersect with Development Footprint |
|---------------------------------|---|--------------------------------------|
| Empty Drey                      | CD00116_WRP_EmptyDrey_Bamford_Mar2019_B         | 6                                    |
| Foraging possum                 | CD00116_WRP_Forage_Bamford_Mar2019_B            | 1                                    |
| Night Sighting of possum        | CD00116_WRP_NightSighting_Bamford_Mar2019_B     | 2                                    |
| Dead Possum                     | CD00116_WRP_Death_Bamford_Mar2019_B             | 1                                    |
| Day Sighting of possum, no drey | CD00116_WRP_DaySightingNoDrey_Bamford_Mar2019_B | 0                                    |

We look forward to receiving the updated draft offset calculator for discussion.

Cheers  
Klara

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