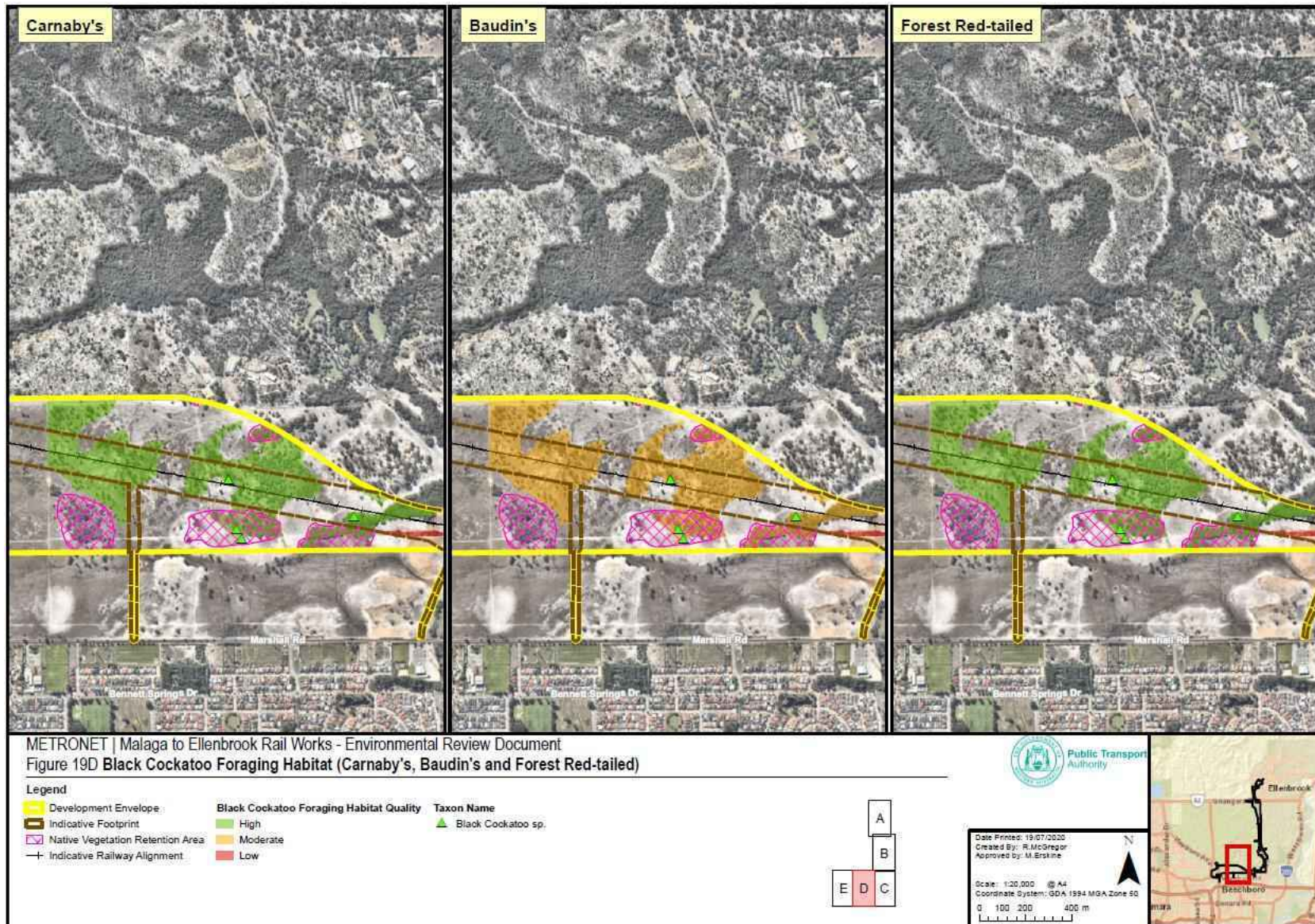
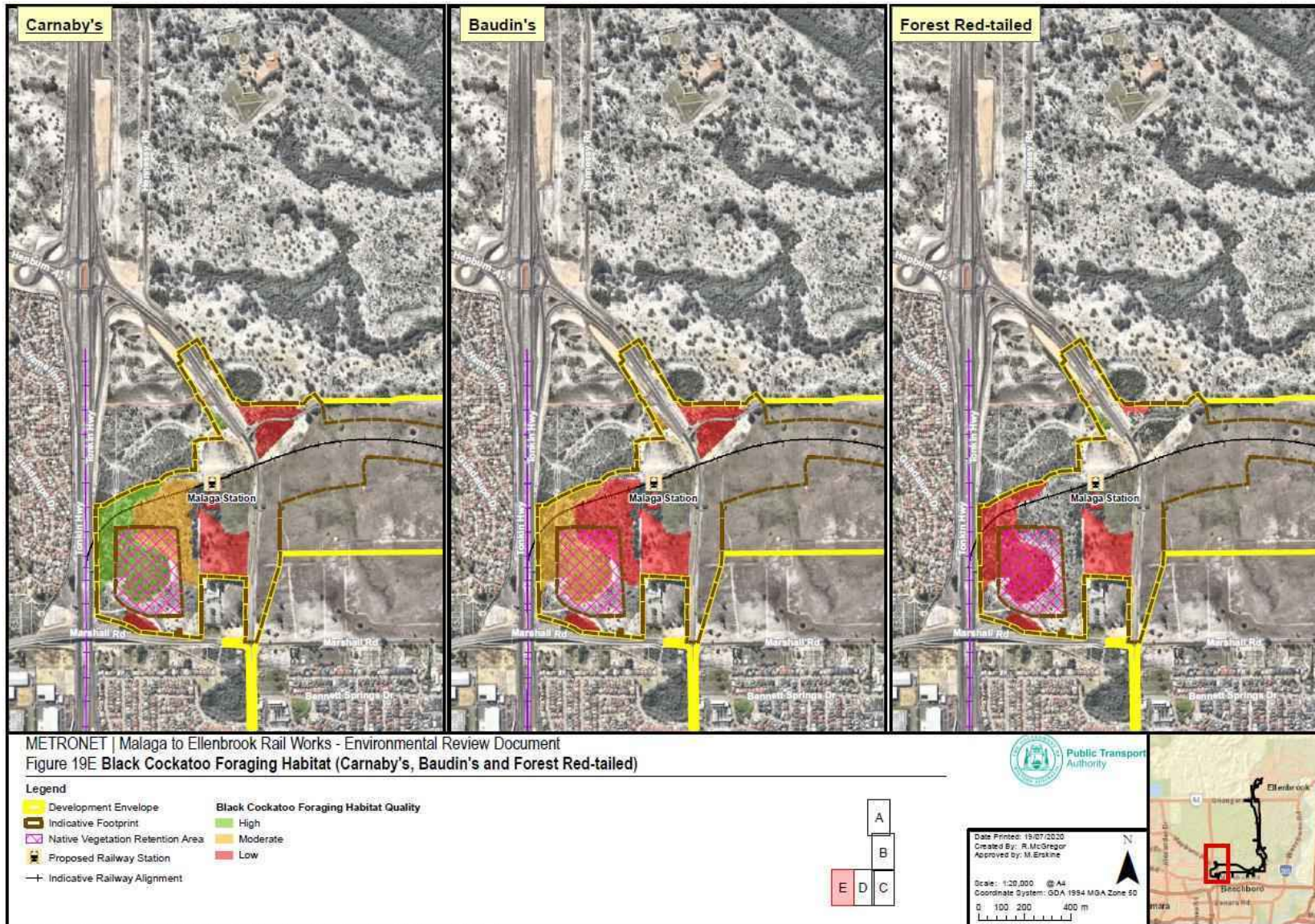


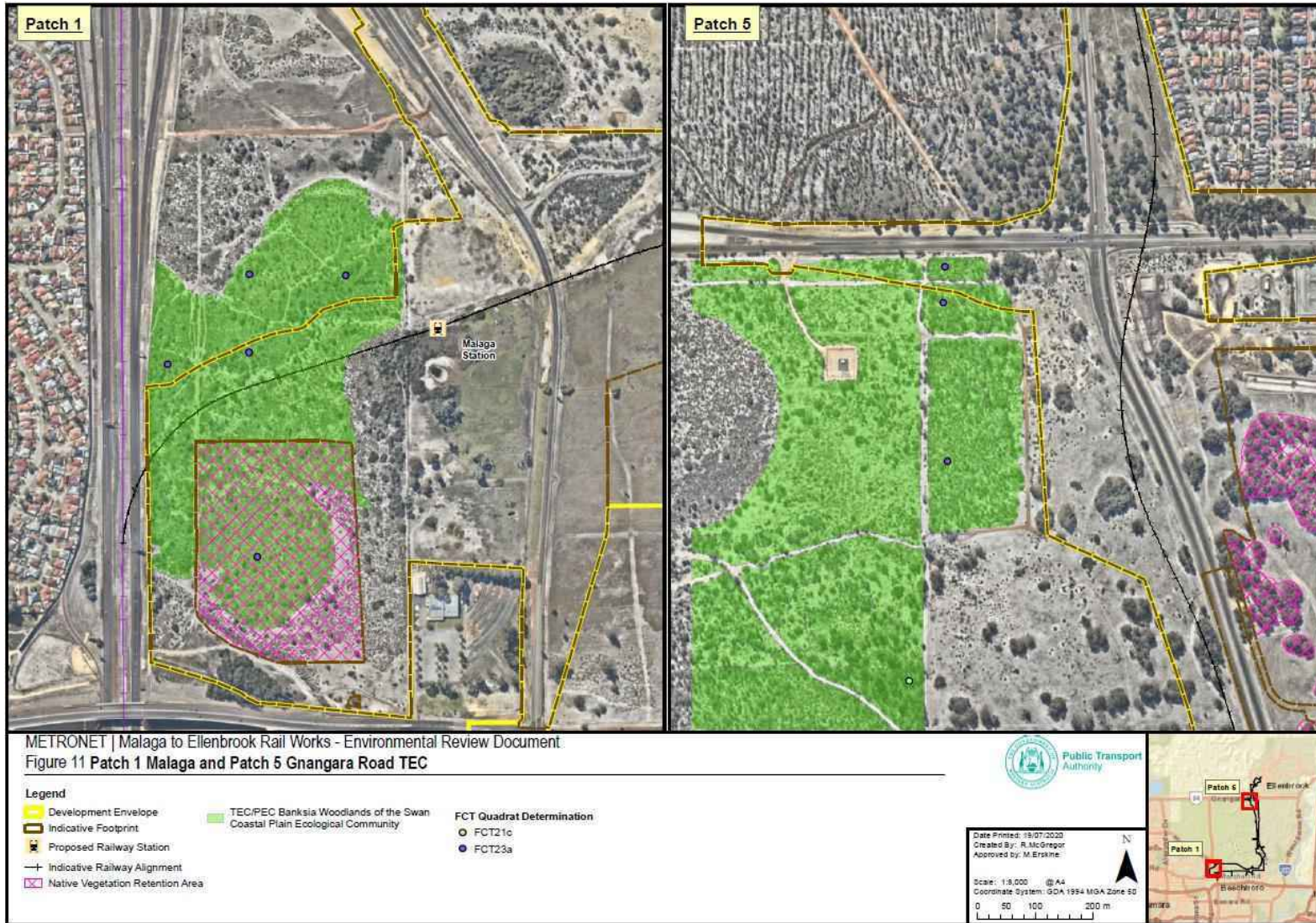
8. Attachment B4 – Black Cockatoo Foraging Habitat



9. Attachment B5 – Black Cockatoo Foraging Habitat



10. Attachment C – Banksia Woodlands of the Swan Coastal Plain TEC within the development envelope. The approval holder is only permitted to clear areas within the dashed yellow line labelled ‘Development Envelope’ that is not within areas marked by pink hatch pattern labelled as ‘Native Vegetation Retention Area’.



DEPARTMENT OF AGRICULTURE, WATER AND THE ENVIRONMENT

To: Chris Videroni, Acting Assistant Secretary, Environment Assessments West (WA, SA, NT) Branch

Proposed Approval Decision Brief (assessment report) – Morley Ellenbrook Rail Line Part 2, WA, (EPBC 2019/8546)

Timing: As soon as possible to allow consultation on proposed conditions.

Recommendation/s:

- Consider the state assessment report at Attachment B1 and the legal considerations at Attachment D
Considered / please discuss
- Agree that the recommended decision at Attachment A, and as summarised in the table below, reflects your proposed decision.
Agreed / Not agreed
- Agree to the proposed conditions of approval as set out in Attachment A.
Agreed / Not agreed
- Sign the letters at Attachments C1 and C2 to consult with WA Department of Water and Environmental Regulation and the proponent on your proposed decision.
Signed / Not signed
- Agree to not publish the proposed decision (Attachment A) on the internet for public comment.
Agreed / Not agreed

Summary of recommendations on each controlling provision:

Controlling Provisions for the action	Recommendation	
	Approve	Refuse to Approve
Listed threatened species and communities (ss 18, 18A)	Approve	

s. 47F(1)

Date: 20 November 2020

**Chris Videroni, Acting Assistant Secretary
Environment Assessments West (WA, SA, NT) Branch**

Comments:

Key Points:

Background

1. The Public Transport Authority of Western Australia (the proponent) propose to clear vegetation to construct part 2 of the Morley Ellenbrook Rail Extension. The proposal involves construction and operation of approximately 13 km of new railway from Tonkin Highway road reserve in Malaga to a new station in Ellenbrook located approximately 12 km to 22 km north east of the Perth Central Business District (Attachments E28A – E28D).
2. The proposed development includes the construction of three new train stations in Malaga, Whiteman Park and Ellenbrook, with scope for a future fourth station at Bennet Springs East. The total development envelope is 463.8 ha with a disturbance footprint of 249 ha (proposal footprint). The proposed development will result in clearing of 152.1 ha of native vegetation including clearing of 64.7 ha of Bush Forever site 304 Whiteman Park which has a total extent of 2,200 ha. (Attachments E28A – E28D).
3. Land adjacent to the proposed development is zoned as either urban, future urban, regional urban space, or state forest (Attachment F24). Land access is obtained under provisions of the *WA Land Administration Act 1997* and the *WA Public Works Act 1902*.
4. The Australian Government has contributed \$500 million towards this project, as part of a more than \$2 billion funding package for METRONET projects in Perth (Attachments F25 and F27).

Controlling provisions, assessment approach and public consultation

5. On 23 September 2019, the proponent referred the proposed action to the Department under the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)* (EPBC Act).
6. On 24 December 2019, a delegate of the Minister determined that the proposed action was a controlled action under the EPBC Act (Attachment F1). This determination was made due to likely significant impacts on EPBC Act listed species and communities (sections 18 and 18A) including:
 - Assemblages of plants and invertebrate animals of tumulus (organic mound) springs of the Swan Coast Plain – Endangered
 - Banksia Woodlands of the Swan Coastal Plain Ecological Community – Endangered
 - Carnaby's Black Cockatoo (*Calyptrorhynchus latirostris*) - Endangered
 - Baudin's Black Cockatoo (*Calyptrorhynchus baudinii*) - Endangered
 - Forest Red-tailed Black Cockatoo (*Calyptrorhynchus banksii naso*) - Vulnerable (FRTBC)
 - Woylie (*Bettongia penicillata ogilbyi*) – Endangered
 - Black-striped Minnow (*Galaxiella nigrostriata*) - Endangered
 - Carter's Freshwater Mussel (*Westralunio carteri*) – Vulnerable
 - Slender Andersonia (*Andersonia gracilis*) - Endangered

- Keighery's Eleocharis (*Eleocharis keigheryi*) - Vulnerable
 - Beaked Lepidosperma (*Lepidosperma rostratum*) - Endangered
 - Swan Hydatella (*Trithuria occidentalis*) - Endangered
7. On 16 March 2020, a delegate of the Minister determined that the proposed action was to be assessed by accredited assessment, at the level of Public Environmental Review (PER), under section 87 of the EPBC Act ([Attachment F31](#)).
8. On 16 June 2020, the proponent requested a variation ([Attachment F3](#)) to the proposed action under s.156A of the EPBC Act. The variation request included:
- defining a smaller development envelope and construction footprint;
 - inclusion of Native Vegetation Retention Areas (NVRA) within the development envelope; and
 - updated information about Black Cockatoo foraging habitat.

The variation was approved by a Delegate of the Minister on 15 July 2020 ([Attachment F4](#)).

9. On 24 March 2020, WA EPA provided the Department with the Draft Environmental Scoping Document (ESD) for adequacy review ([Attachment F5](#)). The Department provided comment on the document on 6 April 2020 ([Attachment F6](#)).
10. On 15, 17 April and 11 May 2020, MetroNet advised the Department that the WA Government requested Main Roads assist MetroNet, the Department and WA Department of Water and Environmental Regulation to facilitate the WA assessment process to meet approval timeframes. The WA Government has determined that this proposal will assist in the economic recovery post the COVID-19 emergency measures.
11. On 15 June 2020, the Prime Minister announced the list of 15 major projects that will be fast-tracked for approval between the Commonwealth, States and Territories. This proposal was included in the announcement under MetroNet rail projects ([Attachment F26](#)).
12. On 16 June 2020, WA EPA provided the Department with the Draft Environmental Review Document (ERD) for adequacy review ([Attachment F7](#)). Initial feedback was provided by the Department on 3 July 2020 ([Attachment F8](#)).
13. The ERD was published for 10 business days of public comment from 27 July 2020 to 10 August 2020. The Department provided supplementary comments to the WA EPA during this period (3 August 2020) ([Attachment F9](#)).
14. On 18 August 2020, the Department was provided with a summary of submissions ([Attachment F10](#)) and the proponent's response to submissions was received on 26 August 2020 ([Attachments F11A and F11B](#)). On 14 September 2020, further information about Black-striped Minnow surveys and an updated Threatened Ecological Community Management Plan were received ([Attachments F12 and F13](#)).
15. On 8 September 2020, line area advice was received from the Office of Water Science that highlighted some limitations in the groundwater modelling ([Attachment F14](#)). These concerns were passed on to the WA EPA on 10 September 2020 and the proponent addressed these concerns in their revised response to submissions document on 21 September 2020 ([Attachment F15](#)).

State assessment and approval

16. On 24 September 2020, the Western Australia Department of Water and Environmental Regulation (DWER) provided the Department with draft state conditions for comment (Attachment F16). The Department provided a response on 28 September 2020 (Attachment F17).
17. On 8 October 2020, DWER provided the Department with a draft Assessment Report and updated draft conditions for consultation (Attachment F18). The Department provided comments back to DWER on 14 October 2020 (Attachment F19).
18. On 2 November 2020, the Department received the final Assessment Report as approved by the WA EPA board (Attachment B1). The report is open to an appeals period until 16 November 2020.

Issues/ Sensitivities

19. The Department agrees with the Western Australian assessment report (Attachment B1) 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.
20. The assessment report states that the proposed development includes clearing of up to:
 - 10.05 ha of Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community (BWSCP TEC);
 - 81.4 ha of foraging habitat for Carnaby's Black Cockatoos;
 - 68.1 ha of foraging habitat for Forest Red-tailed Black Cockatoo; and
 - 423 Black Cockatoo potential breeding trees.

The Department is of the view that the proposed action is also likely to impact on 81.4 ha of Baudin's Black cockatoo foraging habitat.

21. The Department agrees with the conclusions of the WA EPA assessment report (Attachment B1) that concludes the proposal is not expected to result in an unacceptable impact to Matters of National Environmental Significance. In addition to the information provided in the assessment report the following discussion in this brief also refers to the proponent's Environmental Review Documentation (ERD) (Attachments E28A – E28D) for additional supporting evidence, as it provides a greater level of detail on construction activities.

Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community (BWSCP TEC)

Proposed action area

22. The development envelope occurs on the Bassendean Complex-Central and South, Bassendean Complex-North, and Southern River vegetation complexes. Both Bassendean Complexes are strongly associated with BWSCP TEC and the Southern River Complex is moderately associated with the ecological community (Attachment I1).
23. Six patches of BWSCP TEC were identified in field surveys surrounding the development envelope (Attachment F32). Of these, only Patches 1 and 5 are within the development

envelope and will be impacted by the development footprint. With the proposed avoidance and mitigation measures discussed below, the Department considers it is highly unlikely that any BWSCP TEC outside of the development envelope will be impacted by the proposed action and hence only Patch 1 and Patch 5 are discussed from here on.

24. Within the Development envelope, BWSCP TEC (Patches 1 and 5) have been mapped as Floristic Community Type 23a - *Central Banksia attenuata - Banksia menziesii woodlands*. The condition of the BWSCP TEC ranges from degraded to excellent condition (Attachments E6 and E7).
25. Patch 1 was mapped to have an extent of 23.23 ha and Patch 5, 36.75 ha, however this area does not represent the total size of patch 5 as vegetation that meets the key diagnostic characteristics was observed to extend beyond the survey area into Whiteman Park (Attachments E28A – E28D).

Potential impacts

26. The ERD (Attachments E28A – E28D) states the proposed action will result in direct clearance of 8.54 ha of BWSCP TEC from Patch 1 and 1.51 ha from Patch 5. Patch 1 will be dissected into two smaller patches, one 7.73 ha outside the development envelope (Patch 1a), and one 6.95 ha within the development envelope (Patch 1b) (see figure 1 Attachment E29).
27. The assessment report (Attachment B1) also notes that clearing of the BWSCP TEC in patch 1 will result in fragmentation of the patch into two smaller patches, thereby exacerbating edge effects including potential weed and dieback incursion, soil erosion, and potentially impacting the movement of fauna species between the two patches. Direct clearing of patch 5 is restricted to a minor portion of the edge of the patch and hence no fragmentation will occur.
28. The ERD (Attachments E28A – E28D) also identified the following potential impacts to the BWSCP TEC from the proposed development:
- the spread of weeds and *Phytophthora* dieback due to construction works and the movement of machinery through the project area;
 - hydrological changes including changes to groundwater levels and surface water flows, discharged dewatering effluent and disturbance of Acid Sulfate Soils (ASS); and
 - Unintentional clearing or damage of retained patches of BWSCP TEC.

Avoidance and mitigation

29. The ERD (Attachments E28A – E28D) states that the proposal design has been modified iteratively to avoid clearing of native vegetation, with an emphasis on avoiding vegetation in degraded or better condition. Refinements to the Development Footprint have resulted in the area of BWSCP TEC proposed for clearance being reduced from 23.06 ha in the original referral (Attachment E1) to 10.05 ha in the current design.
30. The ERD (Attachments E28A – E28D) and Threatened Ecological Community Management Plan (TECMP) (Attachment F13) states 6.95 ha of Banksia Woodlands TEC will be retained in Native Vegetation Retention Areas (NVRA) within the development envelope. These areas will be protected during construction activities through erecting boundary fencing to prevent unauthorised access or accidental clearing and siltation fences (where necessary)

to prevent surface water erosion impacts. Any permanent fencing around the retained BWSCP TEC will be of mesh chain design, which will allow fauna movement between patches and reduce the impact of fragmentation. Furthermore, all retained patches will be above the minimum size thresholds as outlined in the *Approved Conservation Advice (incorporating listing advice) for the Banksia Woodlands of the Swan Coastal Plain ecological community* and hence will be large enough to retain important ecological function.

31. The Construction Environmental Management Plan (CEMP) (Attachment E23) states all personnel accessing the site will be required to undergo a project environment and heritage induction prior to commencing work. This will include an overview of the risks and obligations associated with protection of the TEC and appropriate management measures during construction activities including no go areas and hygiene practices. All construction contractors will provide boundaries of areas to be cleared surrounding any BWSCP TEC within the development envelope to the Perth Transport Authority (PTA) for review and approval prior to any ground disturbance work. All clearing of intact vegetation within the development envelope will be clearly identified on project mapping and demarcated in the field. Daily visual inspections during clearing activities (and weekly during all other times) will be conducted for evidence of boundary demarcation, unauthorised access or unauthorised clearing.
32. The CEMP (Attachment E23) requires the following hygiene measures to be implemented to reduce the risk of introduction and/or spread of declared weeds and *Phytophthora* dieback:
- controlled entry and exit points to all protectable areas identified as dieback/declared weed free within retained patches of BWSCP TEC using temporary fencing, barriers or signage;
 - ensure top-soil movement is restricted to areas mapped as the same weed or *Phytophthora* dieback interpretation type;
 - source clean fill, gravel and topsoil or other materials from suppliers with appropriate weed and *Phytophthora* control measures;
 - control surface water runoff from infested areas; and
 - vehicle washdowns and visual inspections to ensure all vehicles are weed and soil free prior to entering environmentally sensitive areas.
33. The CEMP (Attachment E23) requires the construction contractor to prepare and submit an Acid Sulfate Soils and Dewatering Management Plan. This plan will cover abstraction bores for construction water supply and dewatering groundwater extraction and disposal requirements. The plan will include:
- establishment of baseline conditions;
 - compliance with relevant groundwater licences;
 - monitoring requirements and trigger thresholds;
 - detailed dewatering points and reinjection well / trench design; and
 - dewatering effluent treatment measures.

The plan is required to be developed in accordance with WA DWER guidelines *Identification and investigation of acid sulfate soils and acidic landscapes* (2015) and *Treatment and*

management of soils and water in acid sulfate soil landscapes (2015). The plan will be assessed and approved by WA DWER with input from their hydrology experts. The Department considers this will provide enough coverage considering the conditions (see below).

34. The CEMP (Attachment E23) outlines surface water controls required to be implemented by the construction contractor including stormwater management measures, runoff diversion measures, separation requirements between chemical and water storage areas and wetlands, washdown bay water discharge requirements and chemical spill response requirements. Some of the key measures required include:
- dewatering effluent will be preferentially re-injected or infiltrated rather than released as surface water and will be tested and treated to ensure it meets DWER ASS criteria for environmental release;
 - all chemicals will be stored in self bunded storage areas in accordance with any dangerous goods licences;
 - chemical spill kits will be located on site and all spill responded to in accordance with PTA spill procedures;
 - drainage and sediment controls (including siltation fences) will be used to prevent offsite discharge of runoff and sedimentation;
 - Water treatment will occur, where required, using techniques such as settlement basins, treatment basins, dosing plants, filtration plants or packaged water treatment units, which will be detailed in the area specific management plans, and in accordance with DWER Guidance Statements and Water Quality Protection Notes.

Conditions

35. *Phytophthora* management is conditioned by condition 8-1(2) of EPA Report 1690 (Attachment B1). This condition requires the proponent to implement hygiene protocols consistent with the *Management of Phytophthora cinnamomi for Biodiversity Conservation in Australia, Part 2 National Best Practice Guidelines*. Condition 8-1(7) of EPA Report 1690 requires the proponent to undertake weed control and management measures to prevent the introduction or spread of weeds.
36. Acid Sulfate Soils are managed through condition 8-1(3) of EPA Report 1690 (Attachment B1). This condition requires the proponent to manage ground disturbing activities in accordance with Acid Sulfate Soil Guideline Series including *Identification and investigation of acid sulfate soils and acidic landscapes* (2015) and *Treatment and management of soils and water in acid sulfate soil landscapes* (2015). Further control will be imposed through the proponents Dewatering and Acid Sulfate Soil Management Plan (see next point).
37. Potential dewatering and acid sulfate soil impacts will be controlled through the construction contractors Dewatering and Acid Sulfate Soil management plan that is required by condition 9-2 of EPA Report 1690 (Attachment B1). Condition 8-1(5) of EPA Report 1690 also prevents groundwater extraction within 50m of identified BWSCP TEC.
38. Condition 8-2(1) of EPA Report 1690 (Attachment B1) states that the proponent shall ensure there are no direct or indirect impacts, when compared to pre-construction baseline conditions, to native vegetation within the Native Vegetation Retention Areas (NVRA) within five (5) years post construction that are attributable to the proposal. This condition covers

the unlikely occurrence of any unforeseen impacts to retained Banksia Woodlands TEC after avoidance and mitigation are implemented.

39. The Department recommends conditions 2, 3 and 4 of the proposed approval decision notice (Attachment A) be applied, that require the proponent to implement the above mentioned EPA Report 1690 conditions.

Consideration of statutory documents

40. Statutory documents relevant to the Banksia Woodlands TEC include the *Approved Conservation Advice (incorporating listing advice) for the Banksia Woodlands of the Swan Coastal Plain ecological community* and the *Threat abatement plan for disease in natural ecosystems caused by *Phytophthora cinnamomi**.
41. The Conservation Advice sets out a number of threats to the ecological community including land clearing, groundwater drawdown, altered fire regimes, dieback, invasive species, and other disturbance such as rubbish dumping or trampling via unauthorised paths. In making this recommendation the Department has had regard to the contents and objectives of the Conservation Advice.
42. While the proposed action may contribute to an increase in some of these threats it is considered that appropriate mitigation will be applied to the point that this increase would be negligible. Where mitigation cannot reduce a threat, for example land clearing, compensatory measures will be provided that align with the conservation advice. The Department, therefore, does not consider that the proposed action is in opposition to the objectives of the Conservation Advice to reduce risk to the Banksia Woodlands TEC through minimising identified threats.
43. As the proponent intends to actively manage for dieback, the Department also believes that in approving the proposed action a delegate would not be acting inconsistently with the *Phytophthora cinnamomi* Threat Abatement Plan.

Acceptability

44. The Assessment Report (Attachment B1) concludes that the above-mentioned avoidance and mitigation measures are suitable to reduce impacts to the BWSCP TEC to an acceptable level. The report also states that the residual impact from clearing of 10.05 ha of BWSCP TEC will still require offsetting. The Department agrees with this conclusion.

Offsets

45. The loss of 10.05 ha of Banksia Woodlands TEC will result in a residual impact requiring compensatory measures under the EPBC Act. In the BWSCP TEC conservation advice, area critical to the survival of the species includes all patches that meet the key diagnostic characteristics and condition thresholds, plus buffer zones (contiguous areas of native vegetation adjacent to the ecological community important for protecting its integrity) (Attachment I1). Therefore, the proponent has committed to offsetting 11.86 ha (10.05 ha of Banksia Woodlands TEC plus 1.81 ha of buffer vegetation).
46. The proponent will offset 100% of this impact through its Lowlands site (Lot 301 on Deposited Plan 77559). The Lowlands site was purchased by the Western Australian Planning Commission (WAPC) in 2014 as an Advanced offset site and in 2015 a Class A conservation reserve status was applied to the site. In 2019 the site was allocated by the State Government to the Perth Transport Authority (PTA) to offset MetroNet proposals. A

portion of this site has already been used as an offset for the Thornlie-Cockburn Link project (EPBC 2018/8188), however there is enough land containing equivalent Banksia Woodlands TEC to offset this proposal (Attachment E23). In addition to securing the site with a Class A conservation covenant, PTA has provided funding to WA Department of Biodiversity, Conservation and Attractions to actively manage the site for seven years. Detailed management measures are outlined in Attachment E23 and includes management for weeds, *Phytophthora*, feral animals, rubbish, unauthorised access and establishment of a Carnaby's Cockatoo watering point.

47. The FCT of the proposed impact site is FCT21a which has been mapped as widespread across the Lowlands site (Attachments E22A and E22B). The proponent has provided offsets calculations (Attachment E22C) that result in an offset area of 77.03 ha. The Department agrees with the figures used in the offsets calculator and is satisfied that the offset will account for 100% of the residual significant impact to the BWSCP TEC.
48. The proposed offset aligns with the BWSCP TEC Conservation Advice, '5.2 *Priority protection and restoration actions*' that states '*It is more practical and cost-effective to maintain existing high quality remnants than to allow their degradation and then attempt rehabilitation of these or other areas.*' (Attachment I1).

Conclusion

49. As discussed above, the proposed action will result in direct impacts to 10.05 ha of the BWSCP TEC that will be offset through condition 8 of the proposed approval decision notice (Attachment A1). The Department is of the view that this will completely compensate the direct clearing.
50. The Department is of the view that any potential indirect impacts to retained BWSCP TEC will be reduced to an acceptable level through conditions 2, 3 and 4 of the proposed approval decision notice (Attachment A1). Therefore, the Department believes the impacts of the proposed action are **acceptable** for the BWSCP TEC.

Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*) – Vulnerable

Baudin's Black Cockatoo (*Calyptorhynchus baudinii*) – Endangered

Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) – Endangered

Proposed action area

51. The development envelope is within the modelled feeding range for Carnaby's Black Cockatoo and within the modelled distribution for Forest Red-tailed Black Cockatoo. It is on the limit of the modelled feeding range of Baudin's Black Cockatoo and outside the modelled breeding range as described in the *EPBC Act Referral Guidelines for Three Threatened Black Cockatoo Species* (Attachment F28).
52. The ERD (Attachments E28A – E28D) states Carnaby's Black Cockatoo and Forest Red-tailed Black Cockatoo have both been recorded flying over and foraging within the development envelope during recent surveys (2016, 2018 and 2020). Baudin's Black Cockatoo has not been recorded within the development envelope but has been recorded nearby in Whiteman Park and is therefore considered to potentially occur within the development envelope. Chewed Marri nuts, Pine cones and *Banksia* infructescence's were all observed within the development envelope indicating active foraging by Black Cockatoos.

53. The ERD (Attachments E28A – E28D) identifies that the development envelope contains 680 Black Cockatoo potential breeding trees (Diameter Breast Height (DBH) > 500mm), including 40 with hollows, all of which were deemed unsuitable for breeding. No evidence of Black Cockatoo breeding was observed in any of the hollows during field surveys (Attachment E11).
54. The ERD (Attachments E28A – E28D) notes that the nearest record occurrence of Carnaby's Cockatoo breeding is at Joondalup Health Campus, approximately 18 km west of the development envelope, where chicks have successfully fledged from nests in natural hollows as well as artificial hollows. The closest known breeding site for Forest Red-tailed Black Cockatoos is approximately 30 km south west of the development envelope at Murdoch University. The development envelope is located outside of the known breeding areas of Baudin's Cockatoo (Attachment F28).
55. The ERD (Attachments E28A – E28D) states there is 47.6 ha of potential suitable roosting habitat identified within the development envelope, however there are no known roosting sites for any of the Black Cockatoo species. The closest known Carnaby's Cockatoo roost sites are in the Gnangara-Pinjar Pine Plantation just north of Ellenbrook (~380 m to the north-west). There are multiple known roost sites for both Carnaby's and Forest Red-tail Black Cockatoo within Whiteman Park (~730 m west) and at a private property in Henley Brook (~340 m east). Baudin's Cockatoo is unlikely to roost in the Perth metropolitan area, as it prefers the Jarrah forest areas to the east.

Potential impacts

56. The ERD (Attachments E28A – E28D) states the proposed action will result in the clearing of Black Cockatoo Foraging Habitat including:
- Loss of 81.4 ha of Carnaby's Cockatoo foraging habitat, comprising:
 - 54.1 ha of Medium and High Quality habitat and 27.3 ha of Low Quality habitat.
 - Loss of 68.1 ha of Forest Red-tailed Black Cockatoo foraging habitat, comprising:
 - 38.0 ha of Medium and High Quality habitat and 30.2 ha of Low Quality habitat.
 - Loss of 81.4 ha of Baudin's Cockatoo foraging habitat, comprising:
 - 42.8 ha of Medium Quality habitat and 38.6 ha of Low Quality habitat.
57. The ERD (Attachments E28A – E28D) states that there is approximately 11,619 ha of potentially suitable foraging habitat within a 10km buffer of the Proposal. The proposed clearing of up to 84.1 ha of Black Cockatoo foraging habitat within the development envelope represents approximately 0.6 – 0.7% of the potential habitat within the regional context. The ERD also states the proposed action will result in the clearing of 423 Black Cockatoo potential breeding trees (DBH > 500mm), including 33 with hollows. No evidence of breeding has been observed in any of the hollows and detailed inspection of each hollow determined that none were suitable for breeding (Attachment E11).
58. Other potential impacts to Black Cockatoos mentioned in the Assessment report (Attachment B1) include:
- injury from vehicle strike during the operational stage;

- noise and vibrations disturbances to roosting Black Cockatoos; and
- impacts to retained foraging habitat due to altered hydrology and increased weed and *Phytophthora* spread.

Avoidance and mitigation

59. The CEMP (Attachment E23) states all potential Black Cockatoo breeding trees within the development envelope will be inspected prior to clearing by a qualified fauna spotter. If Black Cockatoos are found, a 10m radius exclusion zone will be established where no disturbance or clearance will be allowed until after the cockatoos have naturally completed nesting and an appropriately qualified terrestrial fauna spotter has verified the hollows are no longer in use. For any potential breeding trees that remain in the development envelope, monthly visual inspections of marked breeding tree hollows for signs of disturbance and breeding activity will occur throughout the duration of construction. If breeding activity is identified, a 10m buffer will be set up around trees using temporary fencing and clearing will be postponed until WA Department of Biodiversity, Conservation and Attractions advises it suitable to continue.
60. The ERD (Attachments E28A – E28D) states no Black Cockatoo foraging species will be planted within 20m of the rail corridor to deter use of these areas by Black Cockatoos and reduce the risk of vehicle strike. Fencing will be erected along either side of the railway line to prevent fauna accessing the tracks. The fence will be in accordance with PTA standards and will be between 1.8 and 2.4m high.
61. NVRAs (discussed under BWSCP TEC paragraph 30) have been incorporated into the proposal and include the protection of 23.5 ha of quality Carnaby's Cockatoo foraging habitat, 16.0 ha of quality Forrest Red-tailed Black Cockatoo foraging habitat and 17.8 ha of quality Baudin's Cockatoo foraging habitat as well as 201 potential black cockatoo breeding trees (Attachments B1 and E28A – E28D).
62. The ERD (Attachments E28A – E28D) states that the Proposed Action will result in clearing of a linear corridor which is 500 m wide at its widest point. This corridor is unlikely to fragment existing native vegetation to an extent that represents a barrier to movement of Black Cockatoos through the area. The Department agrees with this conclusion.
63. In the proponent's response to public submissions (Attachment F11A) the potential impact to roosting Black Cockatoos through noise and vibrations is considered negligible due to the distance to the closest known roosting site being approximately 340 m away. The Department agrees with this conclusion and has previously been given advice from Black Cockatoo species experts suggesting Carnaby's Cockatoos are often found nesting in noisy areas such as next to major highways (Attachment F30). This potential impact will be further reduced by conditions 11-1 to 11-5 of EPA Report 1690 (see paragraph 66 below).
64. The Department considers that impacts from weeds and *Phytophthora* on Black Cockatoo foraging habitat will be managed through the avoidance and mitigation measures outlined for the BWSCP TEC described previously. The Department does not anticipate any significant impacts from weeds on habitat for Black Cockatoos.

Conditions

65. Although no suitable nesting hollows have been identified within the development envelope, condition 10-1 of EPA Report 1690 requires the proponent to ensure all potential nesting trees with hollows are inspected for nesting Black Cockatoos within seven days prior to

clearing. If hollows are in use by Black Cockatoos for nesting, the proponent shall not disturb or clear within a ten-meter radius of the tree until nesting is complete and the young have fledged and dispersed (as verified by a licensed terrestrial fauna spotter). Condition 10-2 of EPA Report 1690 conditions also requires the use of appropriately qualified licensed terrestrial fauna spotters during all clearing activities.

66. Conditions 11-1 to 11-5 of EPA Report 1690 conditions require the proponent to develop a noise and vibration management plan that will minimise operational noise and vibration impacts on existing noise sensitive receptors as far as practicable. This will further reduce risk of disturbance to Black Cockatoos.
67. The Department recommends condition 5 of the proposed approval decision notice (Attachment A) be applied, that require the proponent to implement the above mentioned EPA Report 1690 conditions.

Consideration of statutory documents

68. Statutory documents relevant to Black Cockatoos include the *Conservation Advice Calyptorhynchus baudinii Baudin's cockatoo*, the *Approved Conservation Advice for Calyptorhynchus banksii naso (Forest Red-tailed Black Cockatoo)*, the *Carnaby's Cockatoo (Calyptorhynchus latirostris) Recovery Plan*, and the *Forest Black Cockatoo (Baudin's Cockatoo Calyptorhynchus baudinii and Forest Red-tailed Black Cockatoo Calyptorhynchus banksii naso) Recovery Plan*.
69. The Department has had regard to the conservation advice for the Forest Red-tailed and Baudin's Black Cockatoo in formulating this recommendation. Specifically, it has considered the identified threats (illegal shooting, habitat loss, nest hollow shortage and competition from other species) and how the proponent intends to mitigate or compensate for an increase in threats to the species resulting from the proposed action.
70. The Department has also considered the Carnaby's Cockatoo Recovery Plan, including identified threats of loss of breeding habitat, foraging habitat and night roosting habitat, collision with vehicles and disease. The Department considers the proposed avoidance and mitigation measures will reduce these threats to a negligible level and where threats cannot be reduced (e.g. loss of foraging habitat), compensatory measures have been proposed. The Department notes that compensatory measures align with recovery actions such as protecting and managing important habitat (Section 14, action 1). The Department therefore does not consider that the proposed action is inconsistent with this plan.
71. Similarly, consideration has been given to the Forest Red-tailed Black Cockatoo and Baudin's Black Cockatoo Recovery Plan. Key threats of killing by illegal shooting, feral Honeybees *Apis mellifera*, habitat loss, nest hollow shortage and competition for available nest hollows has been considered. Given the proposed avoidance and mitigation measures, it is not considered that that proposal will significantly increase any of these threats. Proposed compensatory measures may contribute to recovery actions including managing important sites and protecting them from threatening processes (section 14.9 of the recovery plan). It is therefore considered that your approval of this action would not be inconsistent with this plan.

Acceptability

72. The Assessment Report (Attachment B1) concludes that the above-mentioned avoidance and mitigation measures are suitable to reduce impacts to Black Cockatoos to an acceptable level. The report also states the residual impact from clearing of 81.4 ha of

Carnaby's Black Cockatoo foraging habitat, 68.1 ha of Forest Red-tailed Black Cockatoo foraging habitat and 423 potential Black Cockatoo breeding trees will require offsetting. The Department agrees with this conclusion and additionally requires an offset for 81.4 ha of Baudin's Black Cockatoo foraging habitat.

Offsets

73. The loss of the following are considered residual significant impacts that will need offsetting:

- 81.4 ha of foraging habitat for Carnaby's Black Cockatoo;
- 81.4 ha of foraging habitat for Baudin's Black Cockatoo;
- 68.1 ha of foraging habitat for Forest Red-tailed Black Cockatoo; and
- 423 potential breeding trees

74. The proponent is proposing to offset 90.45% of the impacts to foraging habitat for all three Black Cockatoos and 100% of the potential breeding trees through the Lowlands offset site (discussed). Offsets areas and calculations proposed (Attachment E22C) include:

- Baudin's Black Cockatoo foraging habitat - 358.7 ha
- Forest Red-tailed Black Cockatoo foraging habitat - 263.3 ha
- Carnaby's Black Cockatoo foraging habitat - 337.9 ha
- 423 potential Black Cockatoo breeding trees.

The proponents Offset Strategy (Attachment E22A and E22B) shows that there is enough suitable foraging habitat and potential breeding trees at the site. The Department agrees with the figures used to calculate offsets and the suitability of the offset site.

75. Active management of the Lowlands offset site aligns with section 14 action 1 of the Carnaby's Cockatoo Recovery Plan and section 14.9 of the Forest Red-tailed Cockatoo and Baudin's Cockatoo Recovery Plan (discussed below) by managing important sites and protecting them from threats.

76. The remaining 9.55 % of impacted Black Cockatoo foraging habitat is proposed to be offset through funding of a Murdoch University Black Cockatoo research project. The EPBC offsets policy allows up to 10% of an offset to come from other compensatory measures that are anticipated to lead to benefits for the impacted protected matter (Attachment F29). The proposed research project aims to utilise tracking technology to undertake a movement ecology study of Western Australia's three threatened Black Cockatoo species to determine habitat use and threatening processes on the Perth-Peel Coastal Plain. The objectives of the study are to:

- characterise Black Cockatoo movement and habitat use across the Perth-Peel Coastal Plain and in the south-west forest region for all three Black Cockatoo species;
- study known Carnaby's Cockatoo breeding sites, focussing on characterising habitat suitability, food resource availability and selection, nestling health, specific threatening processes and fledgling dispersal routes;
- identify new breeding sites in inland or southern areas for all three species based on migratory movement of birds to breeding grounds;

- apply new ecotoxicology methods to investigate toxicity cases, particularly in the agricultural zone; and
- predictively model survivorship scenarios for all three species of Black Cockatoo using movement, habitat use and threats.

77. The Department considers the Black Cockatoo research project will assist in understanding movement dynamics which could lead to benefits such as identifying critical habitat, areas under threat and areas for potential future offset sites. The research proposal is attached at Appendix H of Attachment E22B. The proponents Offset Strategy (Attachment E22A and E22B) provides details of how the research project aligns with the Departments EPBC offsets policy (Attachment F29) and Attachment E22D provides calculations showing that the funding provided to Murdoch University equates to 9.55% of the offset value. The research project is fully supported by the Chairs of the Carnaby Cockatoo Recovery Team and the Forest Black Cockatoo Recovery Team and has also previously been approved for indirect offsets for the Thornlie-Cockburn approval (EPBC 2018/8188) and Mitchel Freeway Extension (EPBC 2018/8367).

Conclusion

78. As discussed above, the proposed action will result in the direct clearance of Black Cockatoo foraging habitat and potential breeding trees that will be offset through condition 8 of the proposed approval decision (Attachment A). The Department is of the view that this will completely offset the direct clearing.
79. The Department is of the view that any other potential impacts to Black Cockatoo foraging habitat will be reduced to an acceptable level through conditions 2, 3 and 4 of the proposed approval decision notice (Attachment A). The Department is also of the view that condition 5 of the proposed approval decision notice (Attachment A) will reduce any possible impacts to potential nesting Black Cockatoos to an acceptable level. Therefore, the Department believes the impacts of the proposed action are **acceptable** for all three Black Cockatoo Species.

Grand Spider Orchid (*Caladenia huegelii*) – Endangered

Proposed action area

80. The Development Envelope is within the likely distribution of the Grand Spider Orchid and DBCA database records list two occurrences in close proximity, one at Lightning Swamp 1.7 km south west and the other in the Gnangara area (in 1945), 7.7 km north west of the proposed development. The Departments ERT shows the nearest SPRAT database location is approximately 4.8 km north of the Development Envelope.
81. The Grand Spider Orchid is usually associated with the Bassendean sand-dune system from just north of Perth to Busselton, usually within 20 km of the coast in areas with dense undergrowth. Potentially suitable habitat was mapped in four areas within the development envelope including Patch 1 and Patch 5 BWSCP TEC discussed in paragraphs 23 – 25 above (Attachments E28A – E28D).
82. The ERD (Attachments E28A – E28D) states that targeted surveys were undertaken in Spring 2018 and 2019 in line with *Draft survey guidelines for Australia's threatened orchids 2013* in all areas deemed potentially suitable habitat. No Grand Spider Orchids were found during the surveys however the development envelope contains 20.4 ha of inferred suitable habitat and the development footprint intersects 12.3 ha of this. The *Caladenia hugelii*

recovery plan states that habitat suitable to be potential future translocation sites are habitat critical to the survival of the species (Attachment I3).

83. The ERD (Attachments E28A – E28D), states that 11.1 ha of the 12.3 ha of potentially suitable habitat that intersects the development footprint currently has significant pressure from grazing, weeds and *Phytophthora* dieback which reduces its suitability. It is also currently unknown whether the symbiotic mycorrhizal fungus or pollinating wasp that are essential for the Grand Spider Orchid are present over the 12.3 ha.

Potential impacts

84. The proposal will clear 12.3 ha of potentially suitable habitat for the Grand Spider Orchid, however, during surveys no individuals have been found.
85. Potential unintended impacts include accidental or unauthorised clearing of retained suitable habitat and introduction or spread of weeds and/or *Phytophthora* dieback.

Avoidance and mitigation

86. Control measures for *Phytophthora* and weed management as well as native vegetation clearing described for the BWSCP TEC (paragraphs 31 and 32) are relevant to the Grand Spider Orchid. The Department considers these avoidance and mitigation measures are appropriate to reduce any potential impacts to the species to an acceptable level.

Conditions

87. Weed and *Phytophthora* spread is conditioned as discussed under BWSCP TEC (paragraph 35).

Consideration of statutory documents

88. Statutory documents relevant to the Grand Spider Orchid is the *Grand Spider Orchid (Caladenia huegelii) Recovery Plan* and the *Threat abatement plan for disease in natural ecosystems caused by Phytophthora cinnamomi*. There is no conservation advice relevant to the Grand Spider Orchid.
89. The Department has had regard to the recovery plan in formulating this recommendation. Specifically, it has considered the identified threats (including habitat clearing, invasion of weeds, *Phytophthora* dieback, road and fire break maintenance, inappropriate fire regimes, recreational activities and dumping of rubbish, and loss of important mycorrhizal fungus and wasp pollinators) and recovery actions.
90. The Department considers the proposed avoidance and mitigation measures are suitable to avoid impacts from these identified threats and will not interfere with identified recovery actions. Therefore, the Department does not consider the proposed action is inconsistent with the recovery plan.

Acceptability

91. The Department considers the proposed avoidance and mitigation measures and condition 2 of the proposed approval decision notice (Attachment A) are adequate to reduce the risk of impacts to the Grand Spider Orchid to an acceptable level. Therefore the Department is of the view the action is acceptable in relation to the species.

Offsets

92. No offsets are proposed for the Grand Spider Orchid as there is not deemed to be a residual significant impact after avoidance and mitigation measures are implemented. Offsets required for the BWSCP TEC however, are in habitat that is likely to be suitable for the Grand Spider Orchid. The SPRAT database indicates the presence of the Grand Spider Orchid at two locations within the proposed Lowlands Offset Site which suggests the mycorrhizal fungus and wasp pollinators are present, and hence habitat suitable for the Grand Spider Orchid.

Conclusion

93. The Department is of the view that the proposed action is **unlikely** to significantly impact the Grand Spider Orchid and is **acceptable** in relation to the species.

Assemblages of plants and invertebrate animals of tumulus (organic mound) springs of the Swan Coast Plain – Endangered

Proposed action area

94. The habitat of this community is characterised by continuous discharge of groundwater in raised areas of peat. The peat and surrounds provide a stable, permanently moist series of microhabitats that commonly support healthy fauna populations including *Ostracoda*, *Nematoda*, *Cladocera*, *Copepoda*, *Oligochaeta*, *Tardigrada*, *Turbellaria* and *Insecta*. Some of the fauna species associated with this TEC have no dormant stages and depend on a permanent supply of freshwater, and many non-vascular plant species are also reliant on permanent moisture availability. Hence maintaining hydrological processes including both quantity and quality of water supply to the TEC is essential for its survival (Attachment G4).

95. The TEC is only known from four locations including Muchea, Ellenbrook and two occurrences in Bullsbrook. It occurs along the boundary of the Bassendean Sands and the Guildford Clays geological units where groundwater is forced to the surface creating permanent water sources. Wylie and personal communications with WA EPA indicate the closest occurrence of the TEC is more than 1km north east of the development envelope. Regional groundwater flows predominantly south east and dewatering in the northern end of the development envelope (closest to the known occurrences of the TEC) is expected to be very minimal as groundwater levels in this area are approximately 3m below the surface in this area (Attachments E28A – E28D).

Potential impacts

96. The TEC was triggered for in the referral decision brief as the action was considered to have the potential to impact on groundwater flows feeding the Gngangara Mound aquifer that supports the TEC. Additional information provided by the proponent in the assessment phase (Attachments E28A – E28D and E17) has shown that regional groundwater flows south east, away from the TEC, and groundwater drawdown modelling has shown impacts will not extend beyond the development envelope in the direction of the TEC.

Avoidance and mitigation

97. Avoidance and mitigation are not required as significant impacts are unlikely.

Conditions

98. No conditions are required to protect the Assemblages of plants and invertebrate animals of tumulus (organic mound) springs of the Swan Coast Plain.

Consideration of statutory documents

99. Statutory documents relevant to the TEC include the *Community of Tumulus (organic mound) springs of the Swan Coastal Plain Interim Recovery Plan No. 198*.
100. The Department has had regard to the recovery plan in formulating this recommendation. Specifically, it has considered the identified threats (including clearing, groundwater impacts, water quality impacts, grazing, weed invasion, fire regimes, and dieback). The Department considers the proposed action will not increase any of the identified threats in the recovery plan nor interfere with any identified recovery actions. Therefore, the Department does not consider the proposed action is inconsistent with the recovery plan.

Acceptability

101. The Department is of the view that the proposed action is unlikely to impact the Assemblages of plants and invertebrate animals of tumulus (organic mound) springs of the Swan Coast Plain. Therefore the Department is of the view the action is acceptable in relation to the TEC.

Offsets

102. No offsets are proposed for the Assemblages of plants and invertebrate animals of tumulus (organic mound) springs of the Swan Coast Plain as there is not deemed to be a residual significant impact.

Conclusion

103. The Department considers the proposed action is **unlikely** to impact the Assemblages of plants and invertebrate animals of tumulus (organic mound) springs of the Swan Coast Plain and is **acceptable** in relation to the TEC.

Carter's Freshwater Mussel (*Westralunio carteri*) – Vulnerable

Proposed action area

104. The Carters Freshwater Mussel (CFM) is confined to the south west corner of Western Australia. The species Extent of Occurrence has declined by 49% within three generations primarily due to the impacts of secondary salinisation, seasonal water availability and total nitrogen concentration leading to a decline in habitat quality (Attachment I4).
105. The CFM lives in patchily distributed sandy/muddy sediments of freshwater lakes, rivers and streams with greatest densities associated with woody debris and overhanging riparian vegetation, near stream banks and edges of lakes/dams (Attachment I4). The Department's ERT states that the species or species habitat may occur within the development envelope.
106. CFM are largely sessile, however their Glochidia (larvae of certain freshwater bivalves) are parasitic on native fishes and play an important role in distribution. Therefore, native fish passage is important for survival (Attachment I4).
107. A targeted CFM survey conducted on 30 April and 1 May 2020, found two sub-populations along Bennet Brook. One occurrence was 1km upstream of the development envelope and the other 1.7km downstream. The ERD states that no habitat considered suitable for the CFM is present where the Development Envelope crosses Bennet Brook

due to the lack of any semi-permanent or permanent pools with a sandy substrate (Attachments E28A – E28D).

Potential impacts

108. Although no CFM sub-populations are located within the Development Envelope (Attachments E28A – E28D), indirect impacts through alterations to water availability and quality have the potential to negatively impact the identified upstream and downstream sub-populations. This could occur through groundwater drawdown, chemical spills, increased sediment loads and potential impacts from disturbed acid sulfate soils.
109. Alterations to ongoing flow along Bennet Brook due to the construction of the rail crossing could impact the CFM through impediments to fish movement and hence Glochidia distribution (Attachment B1).

Avoidance and mitigation

110. The CEMP (Attachment E23) states hazardous chemicals on site will be stored in bunded self-contained storage areas in accordance with any Dangerous Goods Licences. Bulk fuel storage will be limited to a centralised construction area away from wetlands and TECs. No refuelling will take place within 50m of wetlands and no dewatering, stormwater effluent or surface drainage will be disposed of to wetlands or feeder channels of Bennet Brook. All relevant staff will be trained on safe handling procedures and incident response, including spill containment, clean up and reporting procedures.
111. The CEMP (Attachment E23) also states that Bennet Brook bridge has been designed with specifications to avoid significant impacts to flow during a 1% Annual Exceedance Probability. The Department considers this design is unlikely to impede fish movement and Glochidia distribution.
112. Controls for water quality and erosion have been established in the CEMP (Attachment E23) that are designed for major rainfall events (up to 1% Annual Exceedance Probability). These controls include stormwater storage and management, testing of water quality in high risk acid sulfate soil areas, chemical storage and refuelling procedures, washdown bay water discharge management, soil stockpiling rules, and the implementation of sediment fences where required. The Department considers these measures are appropriate to avoid impacts to water quality that could impact on the CFM.

Conditions

113. Acid sulfate soils and hydrology changes will be managed through conditions outlined under BWSCP TEC (see paragraph 36 - 39).
114. Maintaining flow conditions within the Bennett Brook is conditioned through conditions 6-1 and 6-2 of the state conditions (Attachment B1). These conditions require the proponent to maintain the hydrological regime of Bennett Brook to support the CFM by:
- Preventing any construction within the banks of the Brook;
 - Preventing excavation activities within the bed of the Brook;
 - Preventing discharge of dewatering effluent to the Brook or feeder tributaries;
 - Restricting access to the Brook; and

- Requiring rehabilitation of areas temporarily disturbed areas with native vegetation.

Consideration of statutory documents

115. Statutory documents relevant to the CFM is the *Conservation Advice Westralunio carteri Carter's freshwater mussel*. There are no recovery plans or threat abatement plans relevant to the CFM.
116. The Department has had regard to the key threats as set out in the Conservation Advice including habitat loss, loss of suitable host species, cattle trampling, and changes in water quality including extraction, salinity or nutrient pollution.
117. While the proposed action may contribute to an increase in some of these threats including changes in water quality and nutrient pollution, it is considered that appropriate mitigation will be applied to the point that this increase would be negligible. It is therefore considered that your approval of this action would not be inconsistent with this plan.

Acceptability

118. The Department considers the proposed avoidance and mitigation measures and condition 7 of the proposed approval decision notice (Attachment A) are adequate to reduce the risk of impacts to the Carter's Freshwater Mussel to an acceptable level. Therefore the Department is of the view the action is acceptable in relation to the species.

Offsets

119. No offsets are proposed for the CFM as there is not deemed to be a residual significant impact after avoidance and mitigation measures are implemented.

Conclusion

120. The Department is of the view that the proposed action is **unlikely** to significantly impact the Carters Freshwater Mussel and is **acceptable** in relation to the species.

Black-striped Minnow (*Galaxiella nigrostriata*) – Endangered

Proposed action area

121. The Black-striped Minnow is confined to acidic ephemeral peat wetlands of south-western Australia. The species has a short life cycle (12 months) and annually aestivate during dry periods each year. Habitat with a shallow depth to groundwater and generally sandy soils are required for the species to burrow and access suitable soil moisture over dry periods (Attachment I5).
122. A desktop wetland assessment for the project identified four wetlands within or adjacent to the development envelope that contain potential Black-striped Minnow habitat (Attachment E10). However, the development footprint only intercepts portions of two of these wetlands (UFI 8678 and UFI 15259).
123. According to the ERD (Attachments E28A – E28D) the closest known occurrence of the species is approximately 12 km north of the Development Envelope.
124. A targeted Black-Stripped Minnow survey was conducted in August 2020 (Attachment F12), coinciding with the most appropriate time to survey. The survey used appropriate survey methods in excess to the methods described in the conservation advice

(Attachment I5). All sites surveyed were found to support suitable habitat for Black-Striped Minnow, however no individuals were detected.

Potential impacts

125. The ERD (Attachments E28A – E28D) states the proposed action will clear 0.5 ha of wetland UFI 8678 and 0.6 ha of wetland UFI 15259. Potential indirect impacts to other surrounding wetlands include changes to hydrology (both surface and groundwater flows), increased sedimentation and turbidity, and changes to water quality due to acid sulfate soils or potential contaminant spills.

Avoidance and mitigation

126. Avoidance and mitigation discussed for the CFM (paragraphs 110 to 112) are applicable to the Black-striped Minnow.

Conditions

127. Acid sulfate soils and hydrology changes will be managed through conditions outlined under Banksia Woodlands TEC (see paragraph 36 - 39).

128. Impacts to the Bennet Brook will be managed through conditions outlined under CFM (see paragraphs 113 and 114 above).

Consideration of statutory documents

129. The statutory document relevant to the Black-striped Minnow is the *Conservation Advice Galaxiella nigrostriata black-stripe minnow*. There are no recovery plans or Threat Abatement Plans relevant to the species.

130. In making this recommendation, the Department has had regard to the contents of the Conservation Advice, including the identified threats of climate change, introduced invasive fish, habitat and groundwater modification, and increased salinity as well as proposed management actions. While the proposed action may contribute to an increase in some of these threats it is considered that appropriate mitigation will be applied to the point that this increase would be negligible. The proposal will not interfere with recovery actions and it is therefore considered that your approval of this action would not be inconsistent with this plan.

Acceptability

131. The Department considers the proposed action is unlikely to have any impact on the Black-striped Minnow. Therefore the Department is of the view the action is acceptable in relation to the species.

Offsets

132. No offsets are proposed for the Black-striped Minnow as there is not deemed to be a residual significant impact after avoidance and mitigation measures are implemented.

Conclusion

133. The Department considers the proposed action is **unlikely** to have a significant impact on the Black-striped Minnow and is **acceptable** in relation to the Species.

Woylie (*Bettongia penicillata ogilbyi*) – Endangered

Proposed action area

134. Current Woylie distribution is concentrated to the south west of Western Australia where there are four known indigenous populations in Dryandra woodland, Tutanning nature reserve, Perup and Kingston. An additional 22 translocated populations have been established in Western Australia, New South Wales and South Australia ([Attachment I6](#)).
135. Woylies are historically known from a variety of habitats however predation by cats and foxes has drastically reduced numbers. Current distributions tend to occupy tall eucalypt forest and woodland, dense myrtaceous shrubland, kwongan (proteaceous) or mallee heath where predator (cat and fox) control or exclusions are in place ([Attachment I6](#)).
136. An 'insurance' population of Woylie has been established in Whiteman Park, protected inside a predator proof fence. This population is approximately 1km from the development envelope ([Attachments E28A – E28D](#)).

Potential impacts

137. The ERD ([Attachments E28A – E28D](#)) states there is no suitable habitat within the development envelope and no records of the Woylie in the local area outside of the Whiteman Park fenced population.
138. Potential indirect impacts could occur if the weeds and or *Phytophthora* dieback spread from the development envelope into the Whiteman Park fenced population.

Avoidance and mitigation

139. Avoidance and mitigation measures for *Phytophthora* and weeds discussed under BWSCP TEC (see paragraph 32) are relevant to the Woylie.

Conditions

140. Weed and *Phytophthora* spread will be conditioned as discussed under BWSCP TEC (paragraph 35).

Consideration of statutory documents

141. Statutory documents relevant to the Woylie include *Conservation Advice Bettongia penicillata woylie*, *National Recovery Plan for the woylie Bettongia penicillate*, the *Threat abatement plan for predation by feral cats*, the *Threat abatement plan for competition and land degradation by rabbits*, the *Threat abatement plan for predation, habitat degradation, competition and disease transmission by feral pigs (Sus scrofa)*, and *Threat abatement plan for disease in natural ecosystems caused by Phytophthora cinnamomi*.
142. The Department has considered the key threats in the Woylie Conservation advice including damage to critical habitat, increased numbers of feral cats and foxes, introduced *Phytophthora cinnamomi* into woylie habitat not currently affected by this pathogen, damage from fire regimes, introduction of diseases that affect woylie and significant acceleration of climate change. The Department considers this proposal will not increase any of these threats except for the introduction of *Phytophthora cinnamomi*. The Department believes the above avoidance and mitigation measures for *Phytophthora* are sufficient to reduce this risk to a negligible level.

143. The Department is of the view that the proposed action will not increase the threat from feral cats, rabbits, feral pigs and *Phytophthora cinnamomi*. Therefore, the Department does not believe the action is inconsistent with the relevant threat abatement plans.

Acceptability

144. The Department considers the proposed avoidance and mitigation measures and condition 2 of the proposed approval decision notice (Attachment A) are adequate to reduce the risk of impacts to the Woylie to an acceptable level. Therefore the Department is of the view the action is acceptable in relation to the species.

Offsets

145. No offsets are proposed for the Woylie as there is not deemed to be a residual significant impact after avoidance and mitigation measures are implemented.

Conclusion

146. The Department is of the view that the proposed action is **unlikely** to significantly impact the Woylie and is **acceptable** in relation to the species.

Slender Andersonia (*Andersonia gracilis*) – Endangered

Keighery's Eleocharis (*Eleocharis keigheryi*) – Vulnerable

Beaked Lepidosperma (*Lepidosperma rostratum*) – Endangered

Swan Hydatella (*Trithuria occidentalis*) - Endangered

147. All of the above mentioned species were triggered for in the referral decision stage due to potentially suitable habitat being located within the development envelope. Initial flora surveys did not identify these species, however, because they were not specifically targeted for, a precautionary approach was taken to trigger for them.

148. All of these species live in winter wet clay pans, swamps or creeks within the Swan Coastal Plain. Flora surveys within the development envelope included targeted wetland flora surveys in spring 2019, which included traversing riparian vegetation along Bennett Brook and West Bennett Brook. In addition, detailed flora and vegetation field assessments were undertaken in spring 2017, 2018 and 2019. No individuals were found during these surveys, however the 2019 targeted wetland flora survey report (Attachment E5) stated the occurrence of *Trithuria occidentalis* as possible in the immediate surroundings of the development envelope.

149. The state assessment report (Attachment B1) states the proponent has committed to undertaking further targeted surveys for *Trithuria occidentalis* before construction commences. If the species is found during these surveys, the proponent must submit a management plan for approval by the Minister before they begin any construction that could impact on the species.

Conditions

150. Condition 9 (Attachment A) requires the approval holder to provide the Department with results of *Trithuria occidentalis* surveys prior to commencement of the action. Should *Trithuria occidentalis* be found during the surveys, the approval holder must develop and submit a *Trithuria occidentalis* management plan for the Minister's approval that ensures the action will not have significant impacts on the species. If a significant impact is unavoidable,

the approval holder will be required to submit a *Trithuria occidentalis* offset strategy for the Minister's approval (See paragraph 155).

Consideration of statutory documents

151. Statutory documents relevant to these species include the *Approved Conservation Advice for Hydatella dioica (One-sexed Hydatella)* (listed as *Trithuria occidentalis* under the EPBC Act). All other species occurrences have been ruled out, so their statutory documents are not relevant.
152. The Department has considered the Approved Conservation Advice for *Hydatella dioica* (listed as *Trithuria occidentalis*) in formulating this recommendation. Particular consideration has been given to its habitat type and cryptic nature. If the species is identified in future surveys, this conservation advice will be considered in developing a management plan and potential offsets.

Acceptability

153. The Department considers the proposed action is unlikely to have a significant impact on the Slender Andersonia, Keighery's Eleocharis or Beaked Lepidosperma. Therefore the Department is of the view the action is acceptable in relation to these species.
154. The Department considers condition 9 and 10 of the proposed approval decision notice (Attachment A) are adequate to reduce the risk of impacts to the *Trithuria occidentalis* to an acceptable level. Therefore the Department is of the view the action is acceptable in relation to this species.

Offsets

155. If surveys indicate *Trithuria occidentalis* is present within the development envelope and is impacted by the proposal, condition 9c of the proposed approval decision notice (Attachment A) will require the proponent to submit a *Trithuria occidentalis* offset strategy for the Minister's approval. This offsets strategy must be submitted within 6 months of commencement of the action and be consistent with the Department's *EPBC Act environmental offsets policy*, and the *Approved Conservation Advice for Hydatella dioica (One-sexed Hydatella)*.

Conclusion

156. The Department considers the proposed action is **unlikely** to significantly impact the Slender Andersonia, Keighery's Eleocharis or Beaked Lepidosperma. The Department considers there is a small chance of residual impact to the Swan Hydatella, however conditions 9 and 10 of the proposed approval decision notice (Attachment A) are deemed adequate to manage any potential impacts to an **acceptable** level.

Project Acceptability

157. The Western Australian assessment report (Attachment B1) concludes that the proposed action is not expected to result in an unacceptable impact on EPBC Act listed species and ecological communities after avoidance and mitigation measures and conditions are implemented. The Department agrees with this conclusion, providing the proponent implements additional conditions proposed at (Attachment A).
158. The proposed action will have a residual significant impact on the BWSCP TEC, Carnaby's Black Cockatoo, Forest Red-tailed Black Cockatoo and the Baudin's Black

Cockatoo. These impacts will be offset by compensatory measures implemented by the proponent.

159. The advice of the Species Information and Policy Section ([Attachment F21](#)), the Environment Reporting Tool (ERT) report of 4 November 2020 ([Attachment F22](#)), and EPBC species and Ecological communities update dated 6 November 2020 ([Attachment F23](#)) have been taken into consideration in the drafting of the proposed approval and conditions. This advice indicates that the recovery plans and conservation advice attached and referred to in this briefing package are the current versions that you are required to consider under the EPBC Act.
160. The Department is not aware of any adverse environmental history associated with the proponent ([Attachment F20](#)), and therefore there is no evidence to suggest the proponent would be unwilling or unable to comply with the proposed conditions of approval.
161. The Department recommends that the proposed action be approved under section 130 and 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 (refer to legal considerations document at [Attachment D](#)).
162. The Department recommends that the approval will have affect until 1 January 2040. The assessment documentation indicates construction is expected to be completed in 2024 and the proponent is committed to monitoring for 5 years post construction with potential remedial action to follow. To take into consideration any delays in the proposal and time required for potential rehabilitation, the Department recommends a timeframe until 2040 is appropriate.

Public submissions on assessment documents

Number For Against Not specified

Consultation:

163. The Environmental Review Document was released for public review from 27 July 2020 to 10 August 2020. Five submissions were received raising issues including:
- potential impacts to groundwater dependent vegetation from construction and the ongoing presence of the dive structure;
 - potential impacts to Bennett Brook, adjacent wetlands, and ground water hydrological regimes; and
 - potential to undertake on-ground management activities within Whiteman Park to offset potential significant residual impacts.

These issues were addressed in the proponent's response to public submissions documentation at [Attachment F11A](#).

Consultation

164. 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:

- Mr Owen Thomas, Executive Director, Public Transport Authority of Western Australia (the proponent); and
- Mr Mike Rowe, Director General, Western Australian Department of Water and Environmental Regulation.

165. The Department's Office of Compliance and Post Approvals Section were consulted on the proposed conditions. The comments received are at Attachments F33 and F34.

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

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

Director
Projects Assessments West 1
Environment Assessments West (WA, SA, NT)
Branch
Ph: s. 22(1)(a)(ii)
November 2020

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

ATTACHMENTS

Attachment	Description
	Proposed approval decision
A:	Proposed approval decision notice
	Assessment reports
B1:	Assessment Report and Recommended Environmental Conditions (EPA Report 1690).
B2:	Ministerial Statement ##### (to come).
	Letters
C1:	FOR SIGNATURE Letter to proponent
C2:	FOR SIGNATURE Letter to WA DWER
	Legal considerations
D:	Legal Considerations

	Assessment Documents
	<i>Environmental Review Documentation</i>
E1:	Morley-Ellenbrook Referral
E2:	Appendix A – Environmental Scoping Document
E3:	Appendix B – Bamford Black Cockatoo and Black Striped Minnow Memo
E4:	Appendix C – Short Range Endemic and Conservation Significant Invertebrate Fauna survey
E5:	Appendix D – Detailed Flora and Vegetation Assessment
E6:	Appendix E – Banksia Woodland Assessment Patch 1
E7:	Appendix F – Banksia Woodland Assessment Patch 2
E8:	Appendix G – Phytophthora Dieback Occurrence
E9A:	Appendix H – Terrestrial Fauna and Black Cockatoo Habitat – Part 1
E9B:	Appendix H – Terrestrial Fauna and Black Cockatoo Habitat – Part 2
E10:	Appendix I – Wetland Desktop Assessment
E11:	Appendix J – Black Cockatoo Breeding Hollow Inspection
E12:	Appendix K – Bennett Brook Carters Freshwater Mussels
E13:	Appendix L – Preliminary Acid Sulfate Soils Investigation
E14:	Appendix M – Preliminary Site Investigation
E15:	Appendix N - Project Definition Plan Flooding and Hydrology Report
E16:	Appendix O – Geomorphic Wetlands Impact Assessment
E17:	Appendix P – Strategic Hydrological Assessment
E18:	Appendix Q – Annual Hydrology Monitoring 2018-19
E19:	Appendix R – Desktop Aboriginal Heritage Analysis
E20:	Appendix S – Native Vegetation Assessment Stage 3
E21:	Appendix T – Draft Offsets Strategy
E22A:	Final offsets strategy part 1
E22B:	Final offsets strategy part 2
E22C:	Offsets Calculator values
E22D:	Offset funding calculations
E22E:	DBCA Funding MoU

E23:	Appendix U – Construction Environmental Management Plan
E24:	Appendix V – Native Vegetation Management Plan
E25:	Appendix W – Acid Sulfate Soils Management Plan
E26:	Appendix X – Threatened Ecological Community Management Plan
E27:	Appendix Y – Greenhouse Gas Assessment
E28A:	Appendix Z1 – Environmental Review Document Part 1
E28B:	Appendix Z2 – Environmental Review Document Part 2
E28C:	Appendix Z3 – Environmental Review Document Part 3
E28D:	Appendix Z4 – Environmental Review Document Part 4
E29:	Response to public submissions document
	Other Information:
F1:	Referral decision notice
F2:	Referral decision brief
F3:	Variation Request
F4:	Approval Variation Request
F5:	Draft Environmental Scoping Document
F6:	Departments comments on Environmental Scoping Document
F7:	Draft Environmental Review Document
F8:	Departments comments on Environmental Review Document
F9:	Supplement comments on Environmental Review Document
F10:	Summary of Public Submissions
F11A:	Proponents Revised Response to Public Submission
F11B:	Proponents Revised Response to Public Submissions – Attachment A
F12:	Black-striped Minnow Survey
F13:	Revised Threatened Ecological Management Plan
F14:	Office of Water Science Advice
F15:	Updated Response to Submissions
F16:	Draft State Conditions (24 September 2020)
F17:	Departments Response to Draft Conditions

F18:	Draft Assessment Report (8 October 2020)
F19:	Departments Response to Draft Assessment Report (14 October 2020)
F20:	Proponent Environmental History Check
F21:	Species Information and Policy Advice
F22:	ERT report 04/11/2020
F23:	EPBC Species and Ecological Communities Update 06/11/2020
F24:	Urban Planning Zones
F25:	Project business case
F26:	Major projects media release
F27:	Media release (METRONET funding)
F28:	Black Cockatoo Referral Guidelines
F29:	EPBC offsets policy
F30:	Carnaby's roosting information
F31:	Assessment approach decision notice
F32:	Banksia Woodlands TEC Patches
F33:	Post Approvals comments on draft conditions
F34:	Compliance comments on draft conditions
	Recovery Plans
G1	Carnaby's Black Cockatoo
G2	Forest Red-tailed Black Cockatoo and Baudin's Black Cockatoo
G3	Grand Spider Orchid
G4	Community of Tumulus (organic mound) springs of the Swan Coastal Plain
G5	Woylie
	Threat Abatement Plans
H1	Phytophthora cinnamomi
H2	Feral cats
H3	Rabbits
H4	Feral pigs
	Conservation Advices

I1	Banksia Woodlands of the Swan Coastal Plain TEC
I2	Baudin's Black Cockatoo
I3	Forest Red-tailed Black Cockatoo
I4	Carter's Freshwater Mussel
I5	Black-stripe minnow
I6	Woylie
I7	Hydatella dioica (listed as Trithuria occidentalis under the EPBC Act)

Table 1 – Malaga to Ellenbrook Rail Works Suggested Changes to Draft Conditions (provided to PTA by DAWE on 20/11/2020)

Draft Condition Number	Suggested Change	Reason for Change
1	To minimise impacts to EPBC Act listed species and ecological communities, the approval holder must not clear more than the following areas within the Development Envelope marked by yellow and labelled as an 'Development Envelope' in Attachments A1 – A4	The PTA preference is to use the terminology Development Envelope rather than Indicative Project Footprint. This also aligns with the State condition 1-1. The indicative project footprint area will not increase, but may move within the Development Envelope.
2, 3, 5, 6, 7	Replace Western Australian EPA Report 1690 with Ministerial Statement	The PTA suggests that all conditions refer to the conditions of the Ministerial Statement. The reason is that this may be changed at a later date to amend conditions referred to in the EPBC approval creating a compliance issue.
4c	If condition 4(a) has not been met due to activities attributable to the action , the approval holder must submit, within twenty two (22) months after cessation of dewatering, a remedial plan for approval by the Minister committing to implementing specified remedial actions to prevent impacts to the Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community. The approval holder must implement the approved remedial plan.	The PTA would like to request additional wording included in this condition, to specifically address impacts attributable to the proposed action. The PTA suggests that responsibility for remediation of impacts are attributable only to the proposed action. To eliminate the potential that other external causes outside of the project control may result in not meeting condition 4(a).
5	To minimise impacts to potential nesting Black Cockatoos, the approval holder must implement condition 10-1, 11-1, 11-2, 11-3, 11-4 and 11-5 of the Western Australian EPA Report 1690	The condition currently references State Conditions 11-1 to 11-5, which addresses minimising noise impacts on humans. The PTA would like to request that reference to State Conditions 11-1 to 11-5 are removed. There are no known nesting sites within 10-20km of this location – noise will not impact black cockatoos

9	<p>"<i>ocidentalis</i>" should be corrected to "<i>occidentalis</i>"</p>	Spelling error
9	<p>The approval holder must have a suitably qualified person survey areas deemed potentially suitable habitat within the development envelope for <i>Trithuria occidentalis</i> and submit to the Department a report of the survey results prior to commencement of works having the potential to impact areas deemed potentially suitable <i>Trithuria occidentalis</i> habitat. Should <i>Trithuria occidentalis</i> be found during the surveys, the approval holder must...</p>	<p>The PTA consider the definition for a 'suitably qualified ecologist' as too specific, and may not be available prior to commencement of the action. The PTA preference is to change to 'suitably qualified person'. The PTA believe a suitably qualified person would still satisfy this condition and the survey requirements.</p> <p>The words "prior to the commencement of the action" have been replaced by "prior to commencement of any works having the potential to impact areas deemed potentially suitable habitat" as this is the relevant affected area.</p>
9 & 9c	<p>'...within 100m of the development envelope for <i>Trithuria occidentalis</i> and submit to the Department a report of the survey results prior to works having the potential to impact areas deemed potentially suitable <i>Trithuria occidentalis</i> habitat.'</p> <p>"....offset strategy for the Minister's approval within six (6) months of commencement of works having the potential to impact <i>Trithuria occidentalis</i> habitat."</p>	<p>The provision of the survey or preparation of an offset strategy should not limit works in other areas of the project that do not affect <i>T. occidentalis</i>. Based on the Approved Conservation Advice by the Commonwealth, the species is only known from one population, therefore, it is unlikely to occur elsewhere on the Project.</p>
10	<p>New condition (g)</p> <p>Where objectives of the plan have been met, the PTAs to provide a written submission to the Minister demonstrating the objectives have been met and request that the plan be no longer implemented.</p>	<p>The PTA request that an additional condition is included within Condition 10. The proposed condition 10(g) specifies an implementation timeframe for the plan.</p>



Government of **Western Australia**
Department of **Water and Environmental Regulation**

Your ref: 2019/8546
Our ref: DWERDG992-20: DWERT5027
Enquiries: [s. 47F\(1\)](#)

Mr Chris Videroni
Acting Assistant Secretary
Environment Assessments West (WA, SA, NT) Branch
Department of Agriculture, Water and the Environment

Email: assessments.west@awe.gov.au; [s. 22\(1\)\(a\)\(ii\)@awe.gov.au](mailto:s.22(1)(a)(ii)@awe.gov.au)

Dear Mr Videroni

***DECISION ON PROPOSED CONDITIONS: MORLEY-ELLENBROOK LINE
PART 2, PERTH, WA (EPBC 2019/8546)***

Thank you for your letter of 20 November 2020 regarding the proposed decision and conditions for the above proposal. I have reviewed the proposed conditions and compared them to the draft Ministerial conditions for the proposal recommended by the Environmental Protection Authority in its Report and Recommendations to the Minister for Environment (Report 1690).

I can advise that the draft conditions are consistent with those in Report 1690 and I would like to provide the following comments.

EPA Services of the Department of Water and Environmental Regulation suggests:

- The draft conditions be updated in the event the Western Australian Minister for Environment makes a decision on the proposal. The update should remove reference to the Western Australian EPA Report 1690 (recommended conditions 2, 3, 5, 6, and 7).
- The definition of potential breeding trees is revised to include marri trees *Corymbia calophylla* (Part C – Definitions).

If you require further information, please contact [s. 47F\(1\)](#) on [s. 47F\(1\)](#) or via email at [s. 47F\(1\) @dwer.wa.gov.au](mailto:s.47F(1)@dwer.wa.gov.au). Please quote the above “Our ref” on any further correspondence.

Yours sincerely

s. 47F(1)

Mike Rowe
DIRECTOR GENERAL

01 December 2020

Attachment C3 – Summary of changes to conditions following consultation

Responder	Condition No.	Comment	Changes to conditions
Public Transport Authority of Western Australia (designated proponent)	1	Change Project Footprint to Development Envelope	The Department has changed the wording in line with the suggestion. This will give the proponent some room for nuancing the design without changing the total area permitted for clearance. This will not introduce new impacts to matters of national environmental significance.
	2, 3, 5, 6, 7	Change EPA report 1690 to Ministerial Statement	This change has been made. The Department always intended to make this alteration however at the time of writing the conditions the Ministerial Statement was not available.
	4c	Add wording 'due to activities attributable to the action'	The Department has added these words to avoid penalising the proponent for impacts not caused by their actions.
	5	Remove reference to EPA conditions 11-1 to 11-5	The Department has removed these references to the State conditions. These conditions relate to noise and vibration management and were initially added as they were considered convenient to add for reducing impacts to Black Cockatoos. The Department has considered the proponents response including the fact that there are no known breeding sites within 15km of the proposed development envelope and the closest known roosting site is more than 300m away. Therefore, the Department believes removing these conditions will not result in a worse environmental outcome.
	9	Change 'suitably qualified ecologist' to 'suitably qualified person'	After discussions with the proponent the Department is satisfied that the Public Transport Authority is engaging experts with suitable skills. PTA has engaged Terry McFarlane, a senior research scientist from the Department of Biodiversity, Conservation and Attractions to provide guidance. Terry specialises in plant taxonomy and has widespread field work experience. The wording of the conditions has been changed to provide more flexibility in the

Attachment C3 – Summary of changes to conditions following consultation

			definition of the suitably qualified expert.
	9 and 9c	Change 'prior to commencement of the action' to 'prior to works having the potential to impact areas deemed potentially suitable <i>Trithuria occidentalis</i> habitat'	The Department agrees with the proposed changed wording and has changed the condition to reflect that actions can start on sections of the project that do not have the potential to impact on <i>Trithuria occidentalis</i> habitat before this condition is met.
	10	Add a condition relating to the <i>Trithuria occidentalis</i> management plan stating: 'Where objectives of the plan have been met, the PTA is to provide a written submission to the Minister demonstrating the objectives have been met and request that the plan be no longer implemented.'	The Department does not see this as a necessary condition and the proponent can add this into the plan itself.
Department of Water and Environmental Regulation	2, 3, 5, 6, 7	Change EPA report 1690 to Ministerial Statement	This change has been made. The Department always intended to make this alteration however at the time of writing the conditions the Ministerial Statement was not available.
	Definitions	The definition of potential breeding trees is revised to include marri trees <i>Corymbia calophylla</i>	The Department agrees with this change and has updated the definition.



EPBC Ref: 2019/8546

EPA Ref: 2238

s. 47F(1)

Director
Public Transport Authority of Western Australia
PO Box 8125
Perth Business Centre
PERTH WA 6849

Dear **s. 47F(1)**

Decision on approval Morley-Ellenbrook Line Part 2, Perth, WA

I am writing to you in relation to a proposal to develop part 2 of the Morley-Ellenbrook rail line, in Perth WA.

I have considered the proposal in accordance with Part 9 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and have decided to grant an approval to the Public Transport Authority of Western Australia. The details of my decision are attached. The proposal must be undertaken in accordance with the conditions specified in the approval.

I would appreciate your assistance by informing me when you start the action and who will be the contact person responsible for the administration of the approval decision.

Please note, any plans required as conditions of approval will be regarded as public documents unless you provide sufficient justification to warrant commercial-in-confidence status.

You should also note that this EPBC Act approval does not affect obligations to comply with any other laws of the Commonwealth, state or territory that are applicable to the action. Neither does this approval confer any right, title or interest that may be required to access land or waters to take the action.

The department has an active audit program for proposals that have been referred or approved under the EPBC Act. The audit program aims to ensure that proposals are implemented as planned and that there is a high degree of compliance with any associated conditions. Please note that your project may be selected for audit by the department at any time and all related records and documents may be subject to scrutiny.

I have also written to the Western Australia Department of Water and Environmental Regulation to inform them of my decision.

If you have any questions about this decision, please contact the project manager, s. 22(1)(a)(ii) by email to s. 22(1)(a)(ii)@awe.gov.au, or telephone s. 22(1)(a)(ii) and quote the EPBC reference number shown at the beginning of this letter.

Yours sincerely

Chris Videroni
Acting Assistant Secretary
Environment Assessments West (WA, SA, NT) Branch
December 2020



EPBC Ref: 2019/8546

EPA Ref: 2238

EPA Ref: 2238
Mr Mike Rowe
Director General
Department of Water and Environmental Regulation
Locked Bag 10 Joondalup DC
PERTH WA 6919

Dear Mr Rowe

**Decision on approval
Morley-Ellenbrook Line Part 2, Perth, WA**

I am writing to you in relation to the proposal by the Public Transport Authority of Western Australia to develop part 2 of the Morley-Ellenbrook rail line, in Perth WA.

I have considered the proposal in accordance with Part 9 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and have decided to grant an approval to the Public Transport Authority of Western Australia. A notice of my decision is attached for your information.

If you have any questions about this decision, please contact the project manager, [s. 22\(1\)\(a\)\(ii\)](#) by email to [s. 22\(1\)\(a\)\(ii\)@awe.gov.au](mailto:s.22(1)(a)(ii)@awe.gov.au), or telephone [s. 22\(1\)\(a\)\(ii\)](#) and quote the EPBC reference number shown at the beginning of this letter.

Yours sincerely

Chris Videroni
Acting Assistant Secretary
Environment Assessments West (WA, SA, NT) Branch
December 2020

EPBC Act Species and Ecological Communities Weekly Report – 3 December 2020

Recent and imminent decisions to list, transfer or delist threatened and migratory species or threatened ecological communities, approve conservation advices, and make or adopt recovery plans, wildlife conservation plans and threat abatement plans.

Significant changes since the last update:

- Minister Ley has made the following threatened species listing decisions, which are in the process of being registered:
 - *Dendronephthya australis* (Cauliflower Soft Coral): List as EN
 - *Nitella parooensis* (a green alga): List as CR
 - *Rhodamnia rubescens* (Scrub Turpentine): List as CR
 - *Rhodomyrtus psidioides* (Native Guava): List as CR
 - *Hippocampus whitei* (White's Seahorse): List as EN
 - *Litoria nannotis* (Waterfall Frog, Torrent Tree Frog): Delete from EN
 - *Litoria rheocola* (Common Mistfrog): Delete from EN
 - *Philothea sporadica* (Kogan Waxflower): Delete from VU
- Briefing on the Woods Well Spyridium has been provided to the Minister
- Briefing on 27 other species listing decisions is being finalised
- Briefing to update the names of 5 listed threatened species is being finalised

Changes since the last report are highlighted in yellow. Statutory decision timeframes are in red text.

Abbreviations for threat categories: EX: Extinct, EW: Extinct in the Wild, CR: Critically Endangered, EN: Endangered, VU: Vulnerable, CD: Conservation Dependent.

Type	Description	State/ Territory	Decision (made/ recommended)	Brief number and status
RECENT DECISIONS – made by Minister or delegate in the past six weeks. The most recent decisions are listed first.				
Threatened Species Listing	<i>Dendronephthya australis</i> (Cauliflower Soft Coral): List as EN	NSW	Amend the list and approve conservation advice	Minister decision. Decision brief (MS20-000292) provided 30 Apr, with decision due by 7 Sep 2020. Revised decision brief (MS20-000945) which split initial brief into four, provided on 21 Aug 2020. Minister Ley extended decision timeframe on 3 Sep 2020, requesting information on consultation with Queensland. Revised briefing (MS20-001649) provided on 30 Nov 2020 with decision due by 4 Dec 2020. Approved by Minister Ley on 2 Dec 2020. In the process of registering instrument and updating SPRAT and the EIAS CRM.
Threatened Species Listing	<i>Nitella parooensis</i> (a green alga): List as CR	NSW	Amend the list and approve conservation advice	Minister decision. Decision brief (MS20-000292) provided 30 Apr, with decision due by 7 Sep 2020. Revised decision brief (MS20-000945) which split initial brief into four, provided on 21 Aug 2020. Minister Ley

				extended decision timeframe on 3 Sep 2020, requesting information on consultation with Queensland. Revised briefing (MS20-001650) provided on 30 Nov 2020 with decision due by 4 Dec 2020. Approved by Minister Ley on 2 Dec 2020. In the process of registering instrument and updating SPRAT and the EIAS CRM.
Threatened Species Listing	<i>Rhodamnia rubescens</i> (Scrub Turpentine): List as CR	Qld, NSW	Amend the list and approve conservation advice	Minister decision. Decision brief (MS20-000292) provided 30 Apr, with decision due by 7 Sep 2020. Revised decision brief (MS20-000945) which split initial brief into four, provided on 21 Aug 2020. Minister Ley extended decision timeframe on 3 Sep 2020, requesting information on consultation with Queensland. Revised briefing (MS20-001651) provided on 30 Nov 2020 with decision due by 4 Dec 2020. Approved by Minister Ley on 2 Dec 2020. In the process of registering instrument and updating SPRAT and the EIAS CRM.
Threatened Species Listing	<i>Rhodomyrtus psidioides</i> (Native Guava): List as CR	Qld, NSW	Amend the list and approve conservation advice	Minister decision. Decision brief (MS20-000292) provided 30 Apr, with decision due by 7 Sep 2020. Revised decision brief (MS20-000945) which split initial brief into four, provided on 21 Aug 2020. Minister Ley extended decision timeframe on 3 Sep 2020, requesting information on consultation with Queensland. Revised briefing (MS20-001652) provided on 30 Nov 2020 with decision due by 4 Dec 2020. Approved by Minister Ley on 2 Dec 2020. In the process of registering instrument and updating SPRAT and the EIAS CRM.
Threatened Species Listing	<i>Hippocampus whitei</i> (White's Seahorse): List as EN	NSW, Qld	Amend the list and approve conservation advice	Minister decision. Decision brief (MS20-000292) provided 30 Apr, with decision due by 7 Sep 2020. Revised decision brief (MS20-000945) which split initial brief into four, provided on 21 Aug 2020. Minister Ley extended decision timeframe on 3 Sep 2020, requesting information on consultation with Queensland. Revised briefing (MS20-001653) provided on 30 Nov 2020 with decision due by 4 Dec 2020. Approved by Minister Ley on 2 Dec 2020. In the

				process of registering instrument and updating SPRAT and the EIAS CRM.
Threatened Species Listing	Three Queensland species for delisting		Agree to amend the list	Minister decision. Threatened Species Scientific Committee advice provided to the Minister on 30 Oct 2020. Decision briefing (MS20-001482) provided on 30 Nov 2020 with decision due by 12 Mar 2021. Approved by Minister Ley on 2 Dec 2020. In the process of registering instrument and updating SPRAT and the EIAS CRM.
	<i>Litoria nannotis</i> (Waterfall Frog, Torrent Tree Frog): Delete from EN	Qld		
	<i>Litoria rheocola</i> (Common Mistfrog): Delete from EN	Qld		
	<i>Philotheca sporadica</i> (Kogan Waxflower): Delete from VU	Qld		
Conservation advice	Revised Conservation Advice for two threatened Christmas Island bird species:		Approved new Conservation Advices	Minister decision. Brief (MS20-001166) provided 18 Sep 2020, approved by Minister Ley on 19 Oct 2020. Conservation Advices published on 29 Oct 2020 and linked to SPRAT. EIAS CRM updated.
	Fregata andrewsi (Christmas Island Frigatebird)	Christmas Island		
	Papasula abbotti (Abbott's Booby)	Christmas Island		
Recovery Plan	Adopt the National Recovery Plan for the Southern Bent-wing Bat (Miniopterus orianae bassanii)	Vic, SA	Adopted the recovery plan	Minister decision. Brief (MS20-000360) provided 17 Sep 2020 and approved by Minister Ley on 19 Oct 2020. Instrument registered 4 Nov, plan in effect from 5 Nov 2020. Recovery plan published and SPRAT and EIAS CRM updated.
Threatened Species Listing	Antrophyum austroqueenslandicum (Lamington Ox Tongue Fern, Border Ranges Lined Fern): List as CR	NSW	Amended the list and approve Conservation Advice	Minister decision. Brief (MS20-001272) provided 30 Sep 2020, with decision due by 9 Feb 2021. Approved by Minister Ley on 19 Oct 2020. Instrument registered 3 Nov, listing in effect from 4 Nov 2020. Conservation Advice published and SPRAT and EIAS CRM updated.
IMMINENT Decisions – currently with Minister or delegate. Decisions with the most imminent deadline are listed first.				
Ecological Community listing	Listing decision for the River-flat Eucalypt forest on coastal floodplains of south-eastern Australia ecological community: List as CR	NSW, Vic	Amend the list and approve Conservation Advice	Minister decision. Threatened Species Scientific Committee advice provided to Minister on 31 Jul 2020. Decision brief (MS20-000778) provided 8 Oct 2020. Decision due by 7 Dec 2020.
Ecological Community listing	Listing decision for the Karst Springs and Associated Alkaline Fens of the Naracoorte Coastal Plain Bioregion ecological community: List as EN	SA, Vic	Amend the list and approve Conservation Advice	Minister decision. Threatened Species Scientific Committee advice provided to Minister on 31 Jul 2020. Decision brief (MS20-000630) provided 23 Nov 2020. Decision due by 7 Dec 2020.
Threatened Species Listing	Listing decision for <i>Neophoca cinerea</i> (Australian Sea-lion): Uplist from VU to EN	WA, SA, Commonwealth Marine Area	Agree to amend the list and approve	Minister decision. Threatened Species Scientific Committee advice and decision briefing

			Conservation Advice	(MS20-001443) provided to Minister on 30 Oct 2020. Decision due by 12 Mar 2021.
Threatened Species Listing	<i>Spyridium fontis-woodii</i> (Woods Well Spyridium): List as CR	SA	Agree to amend the list and approve Conservation Advice	Minister decision. Threatened Species Scientific Committee advice provided to the Minister on 30 Oct 2020. Decision briefing (MS20-001471) provided on 30 Nov 2020. Decision due by 12 Mar 2021.
PENDING DECISIONS – anticipated to go to Minister or delegate in coming six weeks. Items with the most imminent decision are listed first.				
Threatened Species Listing	<i>Asterolasia beckersii</i> (Dungowan Starbush): List as CR	NSW	Amend the list and approve Conservation Advices	Minister decision. Brief (MS20-001280) provided 30 Sep 2020, returned 9 Nov 2020 with request for individual briefing on each species. Revised briefing (MS20-001705) being finalised Decision due by 9 Feb 2021.
Threatened Species Listing	<i>Diuris aequalis</i> (Buttercup Doubletail): Uplist from VU to EN	NSW	Amend the list and approve Conservation Advices	Minister decision. Brief (MS20-001280) provided 30 Sep 2020, returned 9 Nov 2020 with request for individual briefing on each species. Revised briefing (MS20-001706) being finalised Decision due by 9 Feb 2021.
Threatened Species Listing	<i>Galaxias tantangara</i> (Stocky Galaxias): List as CR	NSW	Amend the list and approve Conservation Advices	Minister decision. Brief (MS20-001280) provided 30 Sep 2020, returned 9 Nov 2020 with request for individual briefing on each species. Revised briefing (MS20-001707) being finalised Decision due by 9 Feb 2021.
Threatened Species Listing	<i>Pimelea cremnophila</i> : List as CR	NSW	Amend the list and approve Conservation Advices	Minister decision. Brief (MS20-001280) provided 30 Sep 2020, returned 9 Nov 2020 with request for individual briefing on each species. Revised briefing (MS20-001708) being finalised Decision due by 9 Feb 2021.
Threatened Species Listing	<i>Plinthanthesis rodwayi</i> (Budawang's Wallaby-grass): Uplist from VU to CR	NSW	Amend the list and approve Conservation Advices	Minister decision. Brief (MS20-001280) provided 30 Sep 2020, returned 9 Nov 2020 with request for individual briefing on each species. Revised briefing (MS20-001709) being finalised Decision due by 9 Feb 2021.
Threatened Species Listing	<i>Prostanthera staurophylla</i> (a mint-bush): Uplist from VU to CR	NSW	Amend the list and approve	Minister decision. Brief (MS20-001280) provided 30 Sep 2020, returned 9 Nov 2020 with request for individual briefing on each species. Revised briefing

			Conservation Advices	(MS20-001710) being finalised Decision due by 9 Feb 2021 .
Threatened Species Listing	<i>Uperoleia mahonyi</i> (Mahony's Toadlet): List as EN	NSW	Amend the list and approve Conservation Advices	Minister decision. Brief (MS20-001280) provided 30 Sep 2020, returned 9 Nov 2020 with request for individual briefing on each species. Revised briefing (MS20-001712) being finalised Decision due by 9 Feb 2021 .
Ecological Community listing	Plains Mallee Box Woodlands of the Murray Darling Depression and Riverina Bioregions ecological community: List as CR	NSW, Vic, SA	Amend the list and approve Conservation Advice	Minister decision. Threatened Species Scientific Committee advice provided to Minister on 30 Sep 2020. Decision brief is being finalised. Decision due by 10 Feb 2021 .
Threatened Species Listing	<i>Pipistrellus murrayi</i> (Christmas Island Pipistrelle): Uplist from CR to EX	Christmas Island	Agree to amend the list	Minister decision. Threatened Species Scientific Committee advice provided to the Minister on 30 Oct 2020. Decision due by 12 Mar 2021 . Decision briefing (MS20-001677) being finalised.
Threatened Species Listing	<i>Emoia nativitatis</i> (Christmas Island Forest Skink, Christmas Island Whiptail-skink): Uplist from CR to EX	Christmas Island	Agree to amend the list	Minister decision. Threatened Species Scientific Committee advice provided to the Minister on 30 Oct 2020. Decision due by 12 Mar 2021 . Decision briefing (MS20-001675) being finalised.
Threatened Species Listing	Eleven historically extinct mammal species		Agree to amend the list	Minister decision. Threatened Species Scientific Committee advice provided to the Minister on 30 Oct 2020. Decision due by 12 Mar 2021 . Decision briefing (MS20-001473) being finalised.
	<i>Bettongia anhydra</i> (Desert Bettong): List as EX	NT, WA		
	<i>Bettongia pusilla</i> (Nullarbor Dwarf Bettong): List as EX	WA, SA		
	<i>Conilurus capricornensis</i> (Capricorn Rabbit-rat): List as EX	Qld		
	<i>Notomys robustus</i> (Broad-cheeked Hopping-mouse, Great Hopping-mouse): List as EX	SA		
	<i>Perameles bougainville fasciata</i> (Liverpool Plains Striped Bandicoot): Retain as EX	NSW		
	<i>Perameles bougainville myosurus</i> (Marl): List as EX	WA		
	<i>Perameles bougainville notina</i> (South-eastern Striped Bandicoot): List as EX	Vic, SA		
	<i>Perameles bougainville papillon</i> (Nullarbor Barred Bandicoot): List as EX	WA, SA		
	<i>Pseudomys auritus</i> (Long-eared Mouse): List as EX	Vic, SA		

	<i>Pseudomys glaucus</i> (Blue-grey Mouse): List as EX	Qld, NSW		
	<i>Pteropus brunneus</i> (Percy Island Flying-fox, Dusky Fruit Bat): List as EX	Qld		
Threatened Species Listing	Listing decisions for <i>Nannoperca australis</i> (Southern Pygmy Perch): <ul style="list-style-type: none"> Find species ineligible for listing across its national extent Declare the Murray-Darling Basin lineage as a species for the purposes of the EPBC Act List the Murray-Darling Basin lineage as VU 	ACT, NSW, Tas, Vic, SA	Agree to declare the lineage a species, amend the list and approve Conservation Advice	Minister decision. Threatened Species Scientific Committee advice provided to the Minister on 30 Oct 2020. Decision due by 12 Mar 2021 . Decision briefing (MS20-001461) being finalised.
Threatened Species Listing	<i>Mixophyes fleayi</i> (Fleay's Frog): Retain as EN	Qld, NSW	Amend the list and approve Conservation Advice	Minister decision. Decision brief (MS20-001746), with Threatened Species Scientific Committee advice, being finalised.
Threatened Species Listing	<i>Mixophyes iteratus</i> (Southern or Giant Barred Frog): Downlist from EN to VU	Qld, NSW	Amend the list and approve Conservation Advice	Minister decision. Decision brief (MS20-001747), with Threatened Species Scientific Committee advice, being finalised.
Threatened Species Listing	<i>Philoria kundagungan</i> (Mountain Frog): List as EN	Qld, NSW	Amend the list and approve Conservation Advice	Minister decision. Decision brief (MS20-001748), with Threatened Species Scientific Committee advice, being finalised.
Threatened Species Listing	<i>Philoria richmondensis</i> (Richmond Range Sphagnum Frog): List as EN	NSW	Amend the list and approve Conservation Advice	Minister decision. Decision brief (MS20-001749), with Threatened Species Scientific Committee advice, being finalised.
Threatened Species Listing	<i>Trichosurus vulpecula arnhemensis</i> (Northern Brushtail Possum): List as VU	NT, WA	Amend the list and approve Conservation Advice	Minister decision. Decision brief (MS20-001684), with Threatened Species Scientific Committee advice, being finalised.
Threatened Species Listing	<i>Notomys aquilo</i> (Northern Hopping-mouse, Woorrentinta): Uplist from VU to EN	NT, Qld	Amend the list and approve Conservation Advice	Minister decision. Decision brief (MS20-001785), with Threatened Species Scientific Committee advice, being finalised.

Ecological Community listing	Tasmanian White Gum (<i>Eucalyptus viminalis</i>) Wet Forest ecological community: List as CR	Tas	Amend the list and approve Conservation Advice	Minister decision. Threatened Species Scientific Committee advice provided to Minister on 31 Jul 2020, with decision due by 7 Dec 2020. Decision brief (MS20-000413) provided 17 Sep 2020. On 10 Nov, Minister Ley extended decision timeframe to allow further consultation with land managers. Decision due by 7 Jun 2021.
Threatened species name change	Update the names of 5 listed threatened species:		Amend the list to update the names of five species	Delegate decision. Decision brief being finalised.
	<i>Sauropus macranthus</i> to <i>Breynia macrantha</i>	Qld		
	<i>Bruguiera hainesii</i> to <i>Bruguiera x hainesii</i>	Qld		
	<i>Chaeropus ecaudatus</i> to <i>Chaeropus ecaudatus</i> and <i>Chaeropus yirratji</i>	Extinct		
	<i>Oligosoma lichenigera</i> to <i>Oligosoma lichenigerum</i>	LHI, NI		
	<i>Petrogale lateralis</i> MacDonnell Ranges race to <i>Petrogale lateralis centralis</i>	Central Australia		

Future assessments and other changes...

The full list of species and ecological communities currently undergoing assessment, and the timeframe by which the assessments are due to the Minister, is available here:

www.environment.gov.au/biodiversity/threatened/assessments/fpal

Listing assessments open for public comment are available here:

www.environment.gov.au/biodiversity/threatened/nominations/comment

Draft recovery plans open for public comment are available here:

www.environment.gov.au/biodiversity/threatened/recovery-plans/comment

The change log for [SPRAT](#) which describes updates to distribution maps and other changes is available here: http://apps.internal.environment.gov.au/cgi-bin/erin/change_control/cc_list.pl?application=EPBC

Previous weekly reports are available on the [Information products for threatened species and ecological communities](#) page on the intranet.

Subscribe to receive an email alert when new reports are added

1. Click on this link – [Subscribe to the weekly report](#)
2. Select your preferred alert options. Consider altering the 'Change Type' from the default 'All changes' to when 'New items are added'.
3. Click the OK button to subscribe.
4. You should receive an email confirming that you have successfully created an alert for 'Species and communities weekly reports'.

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

From: s. 22(1)(a)(ii)
Sent: Wednesday, 11 November 2020 7:29 AM
To: s. 22(1)(a)(ii) Species Policy; Environment Protection
Cc: s. 22(1)(a)(ii) Projects Assessments West Section
Subject: RE: EPBC 2019/8546 – Morley Ellenbrook - Statutory document check | PSCB Coordinator [SEC=OFFICIAL]

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

Apologies for the delay in responding to this request.

On behalf of the Protected Species and Communities Branch, I confirm that we are not anticipating any changes to the documents relating to the threatened species and ecological communities identified by EAD in the attached Statutory Document Report/email below in the coming six weeks.

Please note that PSCB has not re-checked whether the correct documents are present or that the citation information is correct.

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

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

Director, Species Information and Policy Section
 Protected Species and Communities Branch, Biodiversity Conservation Division, Department of Agriculture, Water and the Environment
 Ph: s. 22(1)(a)(ii) M: s. 22(1)(a)(ii)

From: s. 22(1)(a)(ii)
Sent: Friday, 30 October 2020 1:09 PM
To: Species Policy <SpeciesPolicy@environment.gov.au>; Environment Protection <Environment.Protection@environment.gov.au>
Cc: s. 22(1)(a)(ii) <[s.22\(1\)\(a\)\(ii\)@environment.gov.au](mailto:s.22(1)(a)(ii)@environment.gov.au)>; s. 22(1)(a)(ii) <[s.22\(1\)\(a\)\(ii\)@environment.gov.au](mailto:s.22(1)(a)(ii)@environment.gov.au)>; s. 22(1)(a)(ii) <[s.22\(1\)\(a\)\(ii\)@environment.gov.au](mailto:s.22(1)(a)(ii)@environment.gov.au)>; Projects Assessments West Section <PAWS@environment.gov.au>
Subject: EPBC 2019/8546 – Morley Ellenbrook - Statutory document check | PSCB Coordinator [SEC=OFFICIAL]

Hi PSCB Coordinator,

As s. 22(1)(a)(ii) noted in his e-mail earlier today I will be the new QA officer for PAWS1.

I have reviewed the below information and the assessment officer has correctly identified the current version of the relevant documents for EPBC 2019/8546.

Are you able to advise if there are any likely changes to these documents in the timeframe indicated below (4/11/2020)?

Thanks

s. 22(1)(a)(ii)
 Administration and Assessment Officer
 Environment Assessments West (WA, SA, NT) Branch
 Environment Approvals Division

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 John Gorton Building, King Edward Terrace, Parkes, ACT
 PO Box 787, CANBERRA CITY ACT 2601

T: s. 22(1)(a)(ii) | E: s. 22(1)(a)(ii)@awe.gov.au



From: s. 22(1)(a)(ii) @environment.gov.au>

Sent: Thursday, 29 October 2020 4:07 PM

To: s. 22(1)(a)(ii) @environment.gov.au>; s. 22(1)(a)(ii) @environment.gov.au>; s. 22(1)(a)(ii) @environment.gov.au>

Subject: Species and Communities Statutory Documents Check for EPBC2019/8546 - Morley Ellenbrook [SEC=OFFICIAL]

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

The proposed decision for the Morley Ellenbrook Rail Extension (EPBC 2019/8546) is likely to be signed by the Delegate Kylie Calhoun on 5/11/2020

The project is located approximately 10 to 20km north east of Perth CBD, WA. Could you please provide advice as to whether or not there are any new, revised or imminent conservation advices, recovery plans or threat abatement plans that may be relevant to this project?

The Species and Communities Statutory Documents Report was unable to be prepared for this project. Please refer to the report provided below:

Species:

- i. Banksia Woodlands of the Swan Coastal Plain Ecological Community
- ii. Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*)
- iii. Baudin's Black Cockatoo (*Calyptorhynchus baudinii*)
- iv. Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*)
- v. Woylie (*Bettongia penicillata ogilbvi*)
- vi. Black-striped Dwarf Galaxias (*Galaxiella nigrostriata*)
- vii. Carter's Freshwater Mussel (*Westralunio cartei*)
- viii. Grand Spider Orchid (*Caladenia huegelii*)
- ix. Assemblages of plants and invertebrate animals of tumulus (organic mound) springs of the Swan Coast Plain
- x. Swan Hydatella (*Trithuria occidentalis*)

Conservation Advice

- i. Threatened Species Scientific Committee (2016). *Approved Conservation Advice (incorporating listing advice) for the Banksia Woodlands of the Swan Coastal Plain ecological community*. Canberra: Department of the Environment and Energy. Available from: <http://www.environment.gov.au/biodiversity/threatened/communities/pubs/131-conservation-advice.pdf>. In effect under the EPBC Act from 16-Sep-2016. [CwIth Conservation Advice; Status=Final; ID=29032].
- ii. 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](#). In effect under the EPBC Act from 15-Feb-2018. [Cwlth Conservation Advice; Status=Final; ID=[29518](#)].
- iii. 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>. In effect under the EPBC Act from 11-Jun-2009. [Cwlth Conservation Advice; Status=Final; ID=[17488](#)].
- iv. Threatened Species Scientific Committee (2018). *Conservation Advice Bettongia penicillata woylie*. Canberra: Department of the Environment and Energy. Available from: <http://www.environment.gov.au/biodiversity/threatened/species/pubs/213-conservation-advice-01022018.pdf>. In effect under the EPBC Act from 01-Feb-2018. [Cwlth Conservation Advice; Status=Final; ID=[29541](#)].
- v. Threatened Species Scientific Committee (2018). *Conservation Advice Galaxiella nigrostriata black-stripe minnow*. Canberra: Department of the Environment and Energy. Available from: <http://www.environment.gov.au/biodiversity/threatened/species/pubs/88677-conservation-advice-11052018.pdf>. In effect under the EPBC Act from 11-May-2018. [Cwlth Conservation Advice; Status=Final; ID=[29596](#)].
- vi. Threatened Species Scientific Committee (2018). *Conservation Advice Westralunio carteri Carter's freshwater mussel*. Canberra: Department of the Environment and Energy. Available from: <http://www.environment.gov.au/biodiversity/threatened/species/pubs/86266-conservation-advice-15022018.pdf>. In effect under the EPBC Act from 15-Feb-2018. [Cwlth Conservation Advice; Status=Final; ID=[29551](#)].
- vii. Department of the Environment, Water, Heritage and the Arts (2008). *Approved Conservation Advice for Hydatella dioica (One-sexed Hydatella)*. Canberra: Department of the Environment, Water, Heritage and the Arts. Available from: <http://www.environment.gov.au/biodiversity/threatened/species/pubs/4898-conservation-advice.pdf>. In effect under the EPBC Act from 16-Dec-2008. [Cwlth Conservation Advice; Status=Final; ID=[13383](#)].

Recovery Plans

- i. Department of Parks and Wildlife (2013). *Carnaby's Cockatoo (Calyptorhynchus latirostris) Recovery Plan*. Department of Parks and Wildlife, Perth, Western Australia. Available from: <http://www.environment.gov.au/resource/carnaby%E2%80%99s-cockatoo-calyptorhynchus-latirostris-recovery-plan>. In effect under the EPBC Act from 30-Jan-2014. [Cwlth Recovery Plan; Status=Final; ID=[25714](#)] as *Calyptorhynchus latirostris*.
- ii. Chapman, T. (2008). *Forest Black Cockatoo (Baudin's Cockatoo Calyptorhynchus baudinii and Forest Redtailed Black Cockatoo Calyptorhynchus banksii naso) Recovery Plan*. Department of Environment and Conservation, Western Australia. Available from: <http://www.environment.gov.au/resource/forest-black-cockatoo-baudin%E2%80%99s-cockatoo-calyptorhynchus-baudinii-and-forest-red-tailed>. In effect under the EPBC Act from 21-Apr-2011. [Cwlth Recovery Plan; Status=Final; ID=[20944](#)] as *Calyptorhynchus baudinii*.
- iii. Yeatman, G.J. & C.J. Groom (2012). *National Recovery Plan for the woylie Bettongia penicillata. Wildlife Management Program No. 51*. Department of Environment and Conservation, Perth. Available

from: <http://www.environment.gov.au/biodiversity/threatened/recovery-plans/national-recovery-plan-woylie-bettongia-penicillata-ogilbyi>. In effect under the EPBC Act from 24-Jul-2012. [Cwlth Recovery Plan; Status=Final; ID=[23943](#)].

- iv. Department of Environment and Conservation (2009). *Grand Spider Orchid (Caladenia huegelii) Recovery Plan*. Commonwealth Department of the Environment, Water, Heritage and the Arts, Canberra. Available from: <http://www.environment.gov.au/resource/grand-spider-orchid-caladenia-huegelii-recovery-plan>. In effect under the EPBC Act from 13-Nov-2009. [Cwlth Recovery Plan; Status=Final; ID=[18142](#)] as *Caladenia huegelii*.
- v. Department of Conservation and Land Management (2006). *Community of Tumulus (organic mound) springs of the Swan Coastal Plain Interim Recovery Plan No. 198*. Perth, Western Australia. Available from: <http://www.environment.gov.au/biodiversity/threatened/publications/recovery/tumulus-moundsprings>. In effect under the EPBC Act from 10-Feb-2012. [Cwlth Recovery Plan; Status=Final; ID=[23788](#)].

Threat Abatement Plans

- i. Department of the Environment and Energy (2018). *Threat abatement plan for disease in natural ecosystems caused by Phytophthora cinnamomi*. Canberra: Commonwealth of Australia. Available from: <http://www.environment.gov.au/biodiversity/threatened/publications/threat-abatement-plan-disease-natural-ecosystems-caused-phytophthora-cinnamomi-2018>. In effect under the EPBC Act from 22-Feb-2019. [Cwlth Threat Abatement Plan; Status=Final; ID=[29679](#)]
- ii. 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>. In effect under the EPBC Act from 23-Jul-2015. [Cwlth Threat Abatement Plan; Status=Final; ID=[28025](#)].
- iii. Department of the Environment and Energy (2016). *Threat abatement plan for competition and land degradation by rabbits*. Canberra, ACT: Commonwealth of Australia. Available from: <http://www.environment.gov.au/biodiversity/threatened/publications/tap/competition-and-land-degradation-rabbits-2016>. In effect under the EPBC Act from 07-Jan-2017. [Cwlth Threat Abatement Plan; Status=Final; ID=[29198](#)].
- iv. Department of the Environment and Energy (2017). *Threat abatement plan for predation, habitat degradation, competition and disease transmission by feral pigs (Sus scrofa) (2017)*. Canberra, ACT: Commonwealth of Australia. Available from: <http://www.environment.gov.au/biodiversity/threatened/publications/tap/feral-pig-2017>. In effect under the EPBC Act from 18-Mar-2017. [Cwlth Threat Abatement Plan; Status=Final; ID=[29274](#)].

Please let me know if you require any further information.

Are you able to provide this advice by 4/11/2020

Thanks

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

Assessment Officer

Environment Assessments West (WA, SA, NT) Branch
Environment Approvals Division

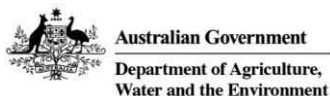
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The Department acknowledges the traditional owners of country throughout Australia and their continuing connection to land, sea and community. We pay our respects to them and their cultures and to their elders both past and present





PROPOSED APPROVAL

Morley-Ellenbrook line part 2, Western Australia, (EPBC 2019/8546)

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

Person to whom the approval is granted (approval holder)	Public Transport Authority of Western Australia
ACN or ABN of approval holder	ABN: 61 850 109 576
Action	To develop Part 2 of the Morley-Ellenbrook rail line, between Malaga and Ellenbrook, Western Australia, subject to the variation of the action accepted by the Minister under section 156B on Wednesday, 15 July 2020

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 01/01/2040

Decision-maker

Name and position	Chris Videroni Acting Assistant Secretary of Environment Assessments West (WA, SA, NT) Branch Department of Agriculture, Water and the Environment
Signature	PROPOSED DECISION DO NOT SIGN
Date of decision	PROPOSED DECISION - DO NOT DATE

Conditions of approval

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

ANNEXURE A – CONDITIONS OF APPROVAL

Part A – Conditions specific to the action

1. To minimise impacts to **EPBC Act listed species and ecological communities**, the approval holder must not clear more than the following areas within the [construction footprint development envelope](#) marked by [pink-yellow](#) and labelled as '[Indicative Project Footprint Development Envelope](#)' in Attachments A1 – A4:
 - a. 81.4 ha of Carnaby's ~~Black~~ **Cockatoo Foraging Habitat** ([Attachment B1 – B5](#))
 - b. 68.1 ha of **Forest Red-tailed Black Cockatoo Foraging Habitat** ([Attachment B1 – B5](#))
 - c. 81.4 ha of Baudin's ~~Black~~ **Cockatoo Foraging Habitat** ([Attachment B1 – B5](#))
 - d. 423 **Black Cockatoo potential breeding trees** ([Attachment B1 – B5](#))
 - e. 10.05 ha of **Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community** ([Attachment C](#))
2. To minimise indirect impacts from weeds, *Phytophthora cinnamomi*, grazing and hydrological changes to the retained areas of the **Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community** and retained **Black Cockatoo Foraging Habitat**, the approval holder must implement conditions 8-1, 8-2(1), 8-2(2), 8-2(3), 9-1(1) of the [Western Australian EPA Report 1690](#).
3. To reduce the risk of impacts to the **Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community** from dewatering at the **Malaga dive structure** the approval holder must implement conditions 9-2, 9-3 and 9-6 of the [Western Australian EPA Report 1690](#).
4. Following completion of ground-disturbing activities associated with construction of the **Malaga dive structure** the approval holder must:
 - a. Within two (2) months of cessation of dewatering, commence monitoring for at least twelve (12) months so as to be capable of determining whether the quality and the hydrological regime of groundwater that supports the biological diversity and **ecological integrity** of the **Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community** is maintained; and
 - b. Submit a report to the **Department**, within twenty (20) **business days** after the sooner of the last monitoring required by condition 4(a) or eighteen (18) months after cessation of dewatering, that demonstrates whether or not the quality and the hydrological regime of groundwater that supports the biological diversity and **ecological integrity** of the **Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community** has been maintained.
 - c. If the quality and the hydrological regime of groundwater that supports the biological diversity and **ecological integrity** of the **Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community** has not been maintained [due to activities attributable to the action](#), the approval holder must submit, within twenty two (22) months after cessation of dewatering, a remedial plan for approval by the **Minister** committing to implementing specified remedial actions to prevent impacts to the **Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community**. The approval holder must implement the approved remedial plan.
5. To minimise impacts to potential nesting **Black Cockatoos**, the approval holder must implement conditions 10-1, ~~11-1, 11-2, 11-3, 11-4 and 11-5~~ of the [Western Australian EPA Report 1690](#).
6. To minimise impacts to terrestrial fauna associated with the **Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community**, the approval holder must implement condition 10-2 of the [Western Australian EPA Report 1690](#).

Commented [OC1]: Removed 'Black' to be consistent with EPBC listing.

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Commented [OC2]: These conditions are related to noise and vibration mitigation measures targeted and nearby residents. The nearest known roosting black cockatoos are more than 300m away and there are no known nesting sites within 10km of the action.

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7. To reduce the risk of impacts to the Carter's Freshwater Mussel, the approval holder must implement conditions 6-1 and 6-2 of the **Western Australian EPA Report 1690**.
8. To compensate for residual significant impacts to the **Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community**, Carnaby's **Black Cockatoo**, Forest Red-tailed Black Cockatoo, and Baudin's **Black Cockatoo**, the approval holder must implement the **Malaga to Ellenbrook Offsets Strategy** including annual reporting commitments specified in section 6.3 of the strategy.
9. The approval holder must have a **suitably qualified ecologist person** survey areas deemed potentially suitable **Trithuria occidentalis** habitat within 100m of the **development envelope** for *Trithuria occidentalis* and submit to the **Department** a report of the survey results prior to commencement of **the action any works that have the potential to impact areas deemed potentially suitable Trithuria occidentalis habitat**. Should *Trithuria occidentalis* be found during the surveys, the approval holder must:
- Submit a *Trithuria occidentalis* management plan for the **Minister's** approval that demonstrates the action will avoid impacts on the species. If the **Minister** approves the *Trithuria occidentalis* management plan then the *Trithuria occidentalis* management plan must be implemented;
 - Not undertake any action that will impact on *Trithuria occidentalis* unless the **Minister** has approved the *Trithuria occidentalis* management plan in writing; and
 - If, under the approved *Trithuria occidentalis* management plan, it is not possible to avoid impacts to *Trithuria occidentalis* the approval holder must submit a *Trithuria occidentalis* offsets strategy for the **Minister's** approval within six (6) months of commencement of **the action any works that have the potential to impact areas deemed potentially suitable Trithuria occidentalis habitat**. The offset strategy must demonstrate how any residual impacts will be offset, be consistent with the **environmental offsets policy**, and align with the **Approved Conservation Advice for Hydatella dioica (One-sexed Hydatella)**.
10. If a *Trithuria occidentalis* management plan is required in accordance with the provisions of condition 9, the approval holder must implement the approved *Trithuria occidentalis* management plan, which must be consistent with the **Department's Environmental Management Plan Guidelines**, and must include:
- Environmental objectives, relevant **EPBC Act protected matter/s** and a reference to **EPBC Act** approval conditions to which the *Trithuria occidentalis* management plan refers;
 - A table of commitments to achieve the objectives, and a reference to where the commitments are detailed in the *Trithuria occidentalis* management plan;
 - Reporting and review mechanisms, and documentation standards to demonstrate compliance with the management plan;
 - An assessment of risks to achieving management plan environmental objectives and risk management strategies that will be applied;
 - Impact avoidance, mitigation and/or repair measures, and their timing; and
 - A monitoring program, which must include:
 - measurable performance indicators;
 - the timing and frequency of monitoring to detect changes in the performance indicators;
 - trigger values for corrective actions; and
 - proposed corrective actions, if trigger values are reached.

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Commented [OC3]: The proponent is getting Terry Mcfarlane Senior Research Scientist at the Western Australian Herbarium who also works for WA DBCA to provide advice and guidance on the *Trithuria occidentalis*. There are very few experts on the species and the Department considers Terry's qualifications are adequate.

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Part B – Standard administrative conditions

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.

Submission and publication of plans

14. The approval holder must:
- a. submit **plans** electronically to the **Department**;
 - b. unless otherwise agreed to in writing by the **Minister**, publish each **plan** on the **website** within 20 **business days** of the date of:
 - i. this approval, if the version of the **plan** to be implemented is specified in these conditions; or
 - ii. that the **plan** is submitted to the **Minister** or the **Department** if the **plan** does not require the approval of the **Minister** but was not finalised before the date of this approval; or
 - iii. that the **plan** is approved by the **Minister** in writing, if the **plan** requires the approval of the **Minister**
 - c. exclude or redact **sensitive ecological data** from **plans** that are to be 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 conditions 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** in accordance with the requirements of the **plan** and conditions.

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 as otherwise agreed in writing by the **Minister**. The approval holder must:
- a. publish each **compliance report** on the **website** within 60 **business days** following the relevant 12 month period;
 - b. 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;
 - c. keep all **compliance reports** publicly available on the **website** until this approval expires;
 - d. exclude or redact **sensitive ecological data** from **compliance reports** to be published on the **website**; and

- e. 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:
 - a. any condition which is or may be in breach;
 - b. a short description of the **incident** and/or non-compliance; and
 - c. 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:
 - a. any corrective action or investigation which the approval holder has already taken or intends to take in the immediate future;
 - b. the potential impacts of the **incident** or non-compliance; and
 - c. 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 for the 12 month period from **the commencement of the action** and for every subsequent 12 month period, or as otherwise requested in writing by the **Minister**.
20. For each **independent audit**, the approval holder must:
 - a. 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.

Revision of action management plans

22. The approval holder may, at any time, apply to the **Minister** for a variation to an action management **plan** approved by the **Minister** under condition 9 or as subsequently revised in accordance with these conditions, by submitting an application in accordance with the requirements of section 143A of the **EPBC Act**. If the **Minister** approves a revised action management **plan** (RAMP) then, from the date specified, the approval holder must implement the RAMP in place of the previous action management **plan**.
23. The approval holder may choose to revise an action management **plan** approved by the **Minister** under condition 9, or as subsequently revised in accordance with these conditions, without

submitting it for approval under section 143A of the **EPBC Act**, if the taking of the action in accordance with the RAMP would not be likely to have a **new or increased impact**.

24. If the approval holder makes the choice under condition 23 to revise an action management plan without submitting it for approval, the approval holder must:
- a. notify the **Department** in writing that the approved action management plan has been revised and provide the **Department** with:
 - i. an electronic copy of the RAMP;
 - ii. an electronic copy of the RAMP marked up with track changes to show the differences between the approved action management **plan** and the RAMP;
 - iii. an explanation of the differences between the approved action management **plan** and the RAMP;
 - iv. the reasons the approval holder considers that taking the action in accordance with the RAMP would not be likely to have a **new or increased impact**; and
 - v. written notice of the date on which the approval holder will implement the RAMP (RAMP implementation date), being at least 20 **business days** after the date of providing notice of the revision of the action management **plan**, or a date agreed to in writing with the **Department**.
 - b. subject to condition 26, implement the RAMP from the RAMP implementation date.
25. The approval holder may revoke their choice to implement a RAMP under condition 23 at any time by giving written notice to the **Department**. If the approval holder revokes the choice under condition 23, the approval holder must implement the action management plan in force immediately prior to the revision undertaken under condition 23.
26. If the **Minister** gives a notice to the approval holder that the **Minister** is satisfied that the taking of the action in accordance with the RAMP would be likely to have a **new or increased impact**, then:
- a. condition 23 does not apply, or ceases to apply, in relation to the RAMP; and
 - b. the approval holder must implement the action management plan specified by the **Minister** in the notice.
27. At the time of giving the notice under condition 26, the **Minister** may also notify that for a specified period of time, condition 23 does not apply for one or more specified action management plans.

Note: conditions 22, 23, 24, 25, 26 and 27 are not intended to limit the operation of section 143A of the **EPBC Act** which allows the approval holder to submit a revised action management plan, at any time, to the **Minister** for approval.

Completion of the action

28. Within 20 **business days** after the **completion of the action**, the approval holder must notify the **Department** in writing of the date of **completion of the action** and provide **completion data**.

Part C - Definitions

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

Approved Conservation Advice for Hydatella dioica (One-sexed Hydatella) means the Department of the Environment, Water, Heritage and the Arts (2008). *Approved Conservation Advice for Hydatella dioica (One-sexed Hydatella)*. Canberra: Department of the Environment, Water, Heritage and the Arts. Available from: <http://www.environment.gov.au/biodiversity/threatened/species/pubs/4898-conservation-advice.pdf>.

Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community means the **EPBC Act** listed Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community

Baudin's Black-Cockatoo means the EPBC Act listed Baudin's Black-Cockatoo (*Calyptorhynchus baudinii*).

Black Cockatoo/s means one or more of the EPBC Act listed Baudin's Black-Cockatoo (*Calyptorhynchus baudinii*), Carnaby's Black-Cockatoo (*Calyptorhynchus latirostris*) and Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*).

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

Carnaby's Black-Cockatoo means the EPBC Act listed Carnaby's Black-Cockatoo (*Calyptorhynchus latirostris*).

Clear/ing 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).

Commencement of the action means the first instance of any specified activity associated with the action including clearing and construction. **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 feral animals, including erection of temporary fencing, and use of existing surface access tracks; and
- 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 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.

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

Development envelope means the area enclosed by the yellow lines designated as 'Development Envelope' in the maps at Attachment A1, Attachment A2, Attachment A3 and Attachment A4.

Ecological integrity is the composition, structure, function and processes of ecosystems, and the natural variation of these elements.

Environmental Management Plan Guidelines means *Environmental Management Plan Guidelines, Commonwealth of Australia 2014* or any revisions of this.

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

EPBC Act listed species and ecological communities means the **Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community, Carnaby's Black-Cockatoo, Forest Red-tailed Black Cockatoo** and, **Baudin's Black-Cockatoo and *Trithuria occidentalis***.

Environmental Offsets Policy means Commonwealth of Australia 2012. *Environment Protection and Biodiversity Conservation Act Environmental Offsets Policy*. Available from <https://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy>.

Forest Red-tailed Black Cockatoo means the **EPBC Act** listed Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*).

Foraging habitat means the areas shown marked shaded in red, amber, and green and labelled as 'Black Cockatoo Foraging Habitat Quality' on the maps *Black Cockatoo Foraging Habitat* in Attachments B1 – B5.

Incident means any event which has the potential to, or does, impact on one or more **protected matter(s)**, other than as authorised by this approval.

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).

Malaga dive structure means the area where the railway extends below ground surface west of the Malaga station and connects to the Bayswater to Malaga rail line.

Malaga to Ellenbrook Offsets Strategy mean the document 'Offsets Strategy, Malaga to Ellenbrook Rail Works Proposal, final_rev_0, October 2020' [as provided to the Department on 3 November 2020 or subsequent revisions as approved by the Minister](#).

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.

New or increased impact means a new or increased environmental impact or risk relating to any **protected matter**, when compared to the likely impact of implementing the action management **plan** that has been approved by the **Minister** under condition 9, including any subsequent revisions approved by the **Minister**, as outlined in the *Guidance on 'New or Increased Impact' relating to changes to approved management plans under EPBC Act environmental approvals* (2017).

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).

Potential breeding trees means ~~Tuart (*Eucalyptus gomphocephala*) and Eucalyptus~~ and **Marri (*Corymbia calophylla*)** trees with a Diameter at Breast Height of greater than 500 mm, [or for Salmon gum and wandoo, a Diameter at Breast Height of greater than 300 mm](#).

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

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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 coordinate system used. Shapefiles must also include an '.xml' metadata file that describes the shapefile for discovery and identification purposes.

~~**Suitably qualified ecologist** means a person who has relevant professional qualifications and at least two (2) years of work experience designing and implementing surveys for *Trithuria occidentalis*, and can give an authoritative assessment and advice on the presence of *Trithuria occidentalis* using relevant protocols, standards, methods and/or literature.~~

Commented [OC4]: See comment in condition 9

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.

***Trithuria occidentalis* habitat** is habitat as defined in Department of the Environment, Water, Heritage and the Arts (2008). *Approved Conservation Advice for Hydatella dioica (One-sexed Hydatella)*. Canberra: Department of the Environment, Water, Heritage and the Arts. Available from: <http://www.environment.gov.au/biodiversity/threatened/species/pubs/4898-conservation-advice.pdf>.

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

ATTACHMENTS

1. Attachment A1 – Development envelope and construction footprint



2. Attachment A2 – Development envelope and construction footprint



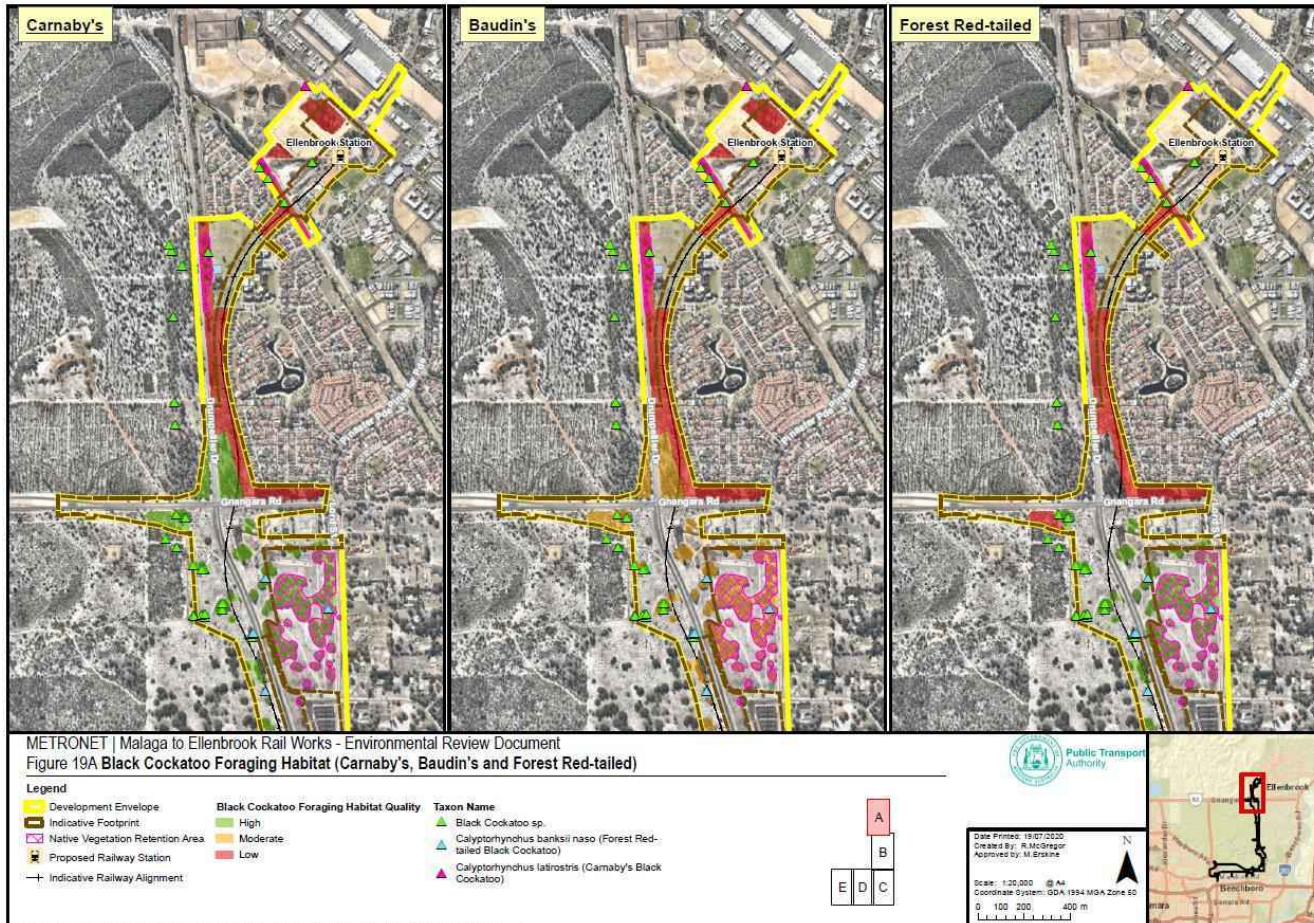
3. Attachment A3 – Development envelope and construction footprint



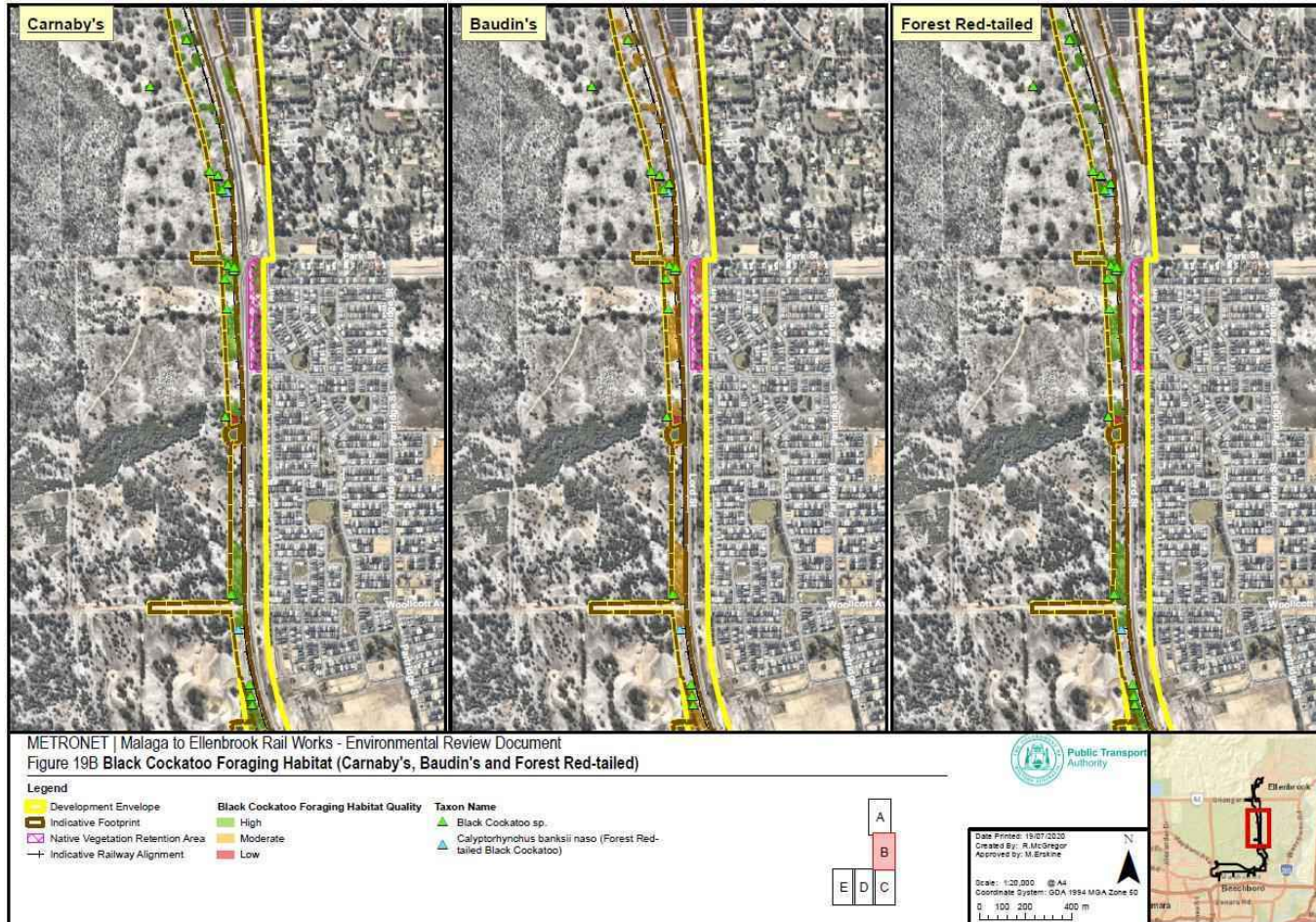
4. Attachment A4 – Development envelope and construction footprint



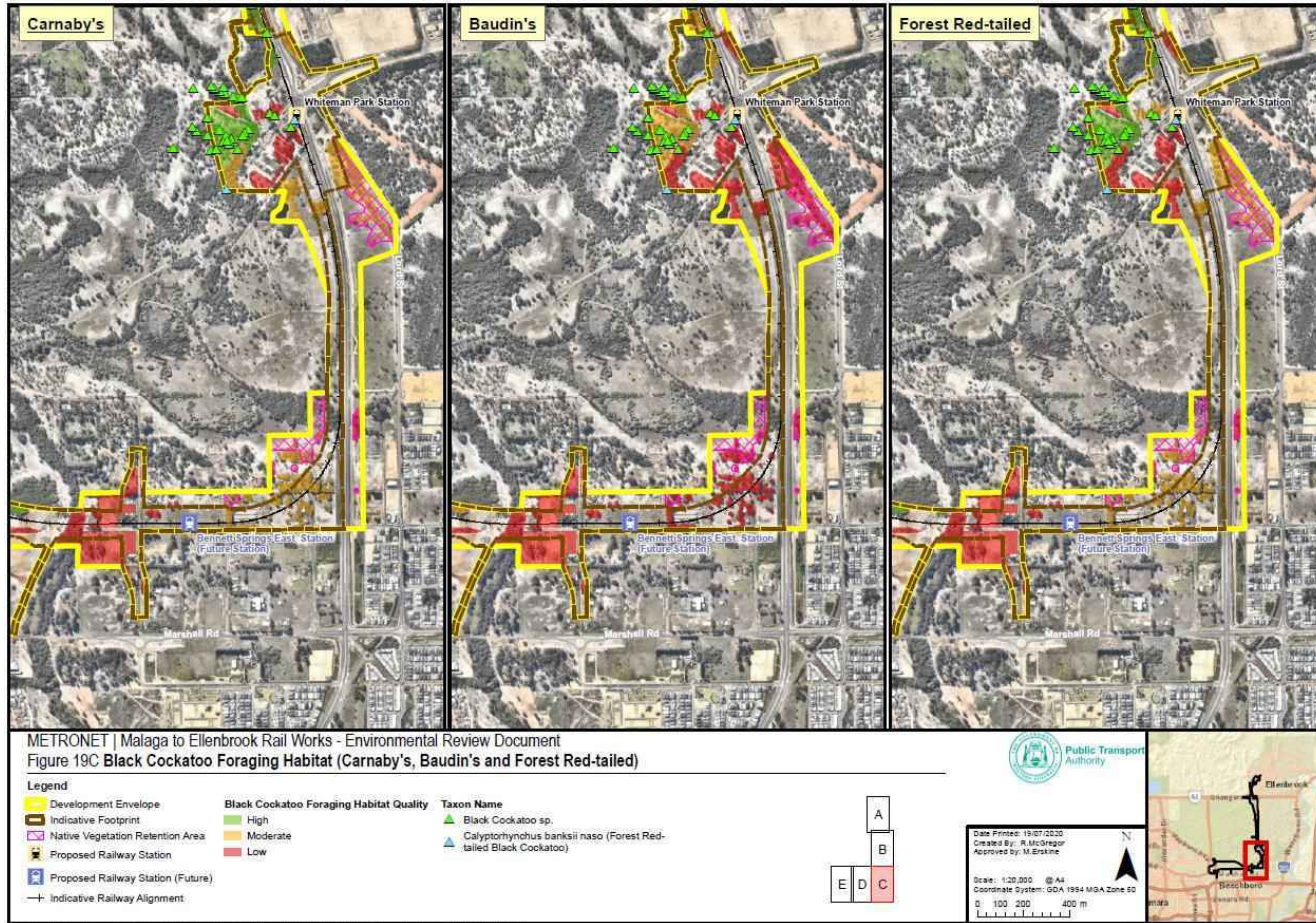
5. Attachment B1 – Black Cockatoo Foraging Habitat



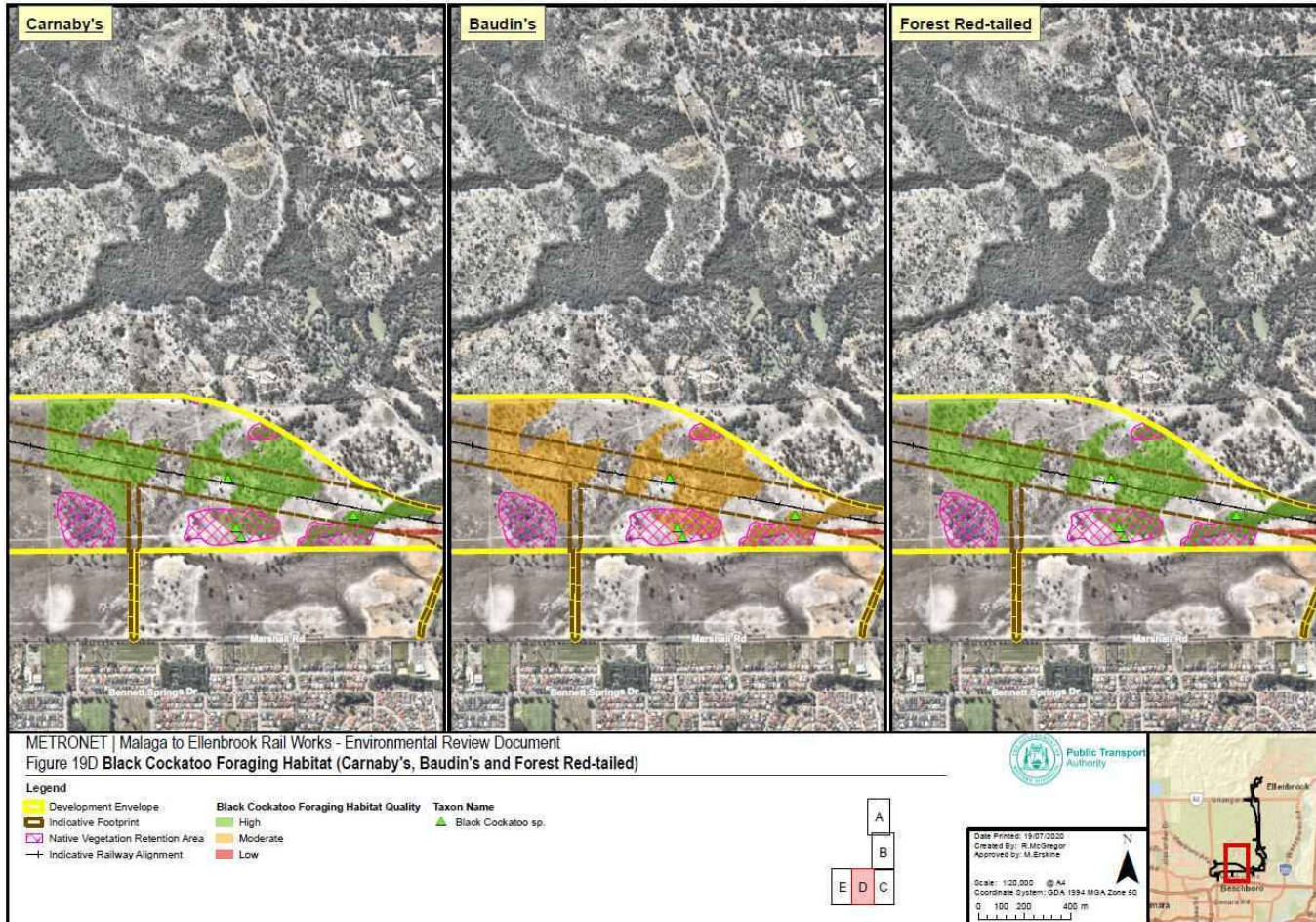
6. Attachment B2 – Black Cockatoo Foraging Habitat



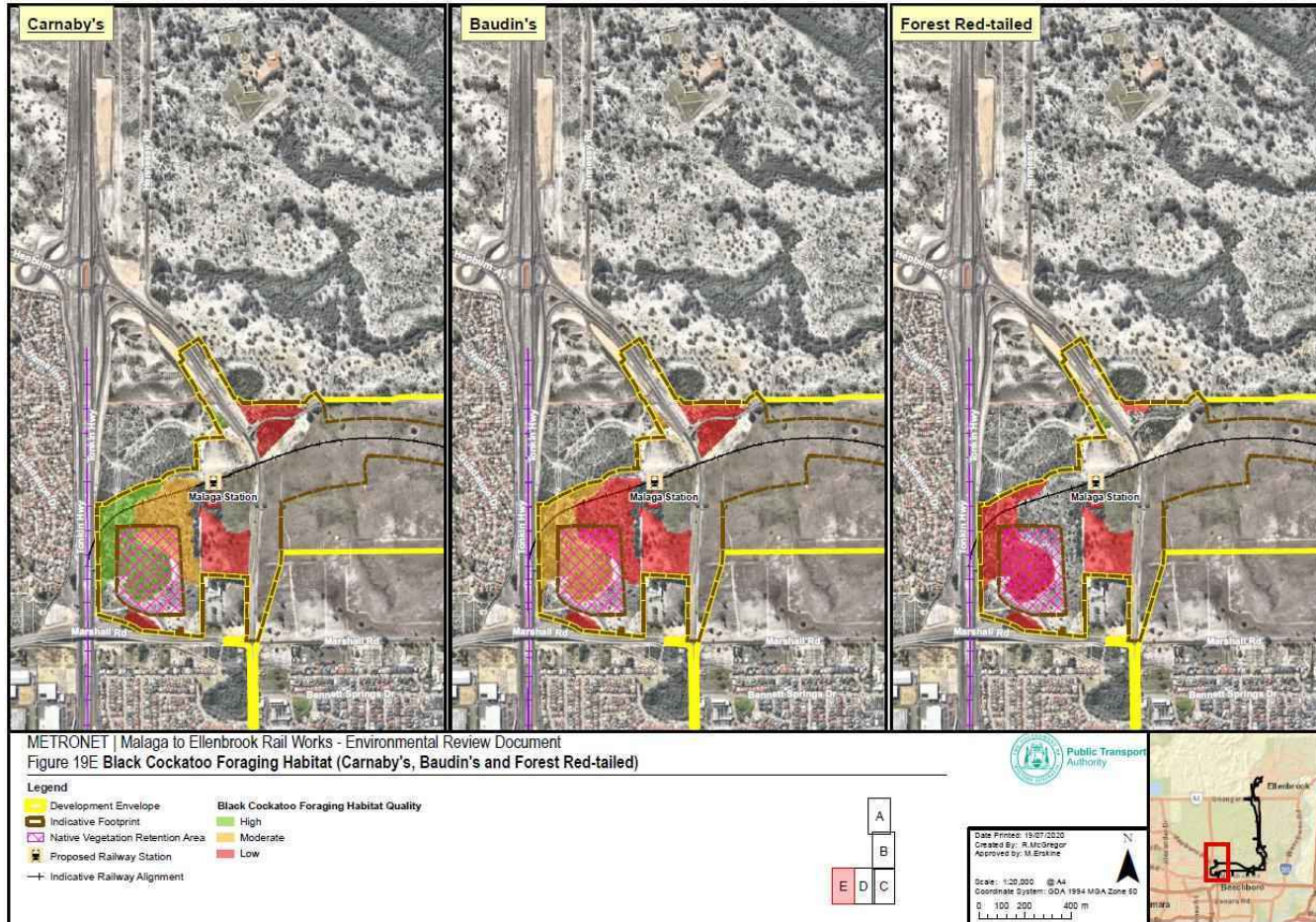
7. Attachment B3 – Black Cockatoo Foraging Habitat



8. Attachment B4 – Black Cockatoo Foraging Habitat



9. Attachment B5 – Black Cockatoo Foraging Habitat



10. Attachment C – Banksia Woodlands of the Swan Coastal Plain TEC within the development envelope. The approval holder is only permitted to clear areas within the dashed yellow line labelled 'Development Envelope' that is not within areas marked by pink hatch pattern labelled as 'Native Vegetation Retention Area'.





s. 47F(1)

Director
Public Transport Authority of Western Australia
PO Box 8125
Perth Business Centre
PERTH WA 6849

Dear **s. 47F(1)**

Request for additional information: Morley-Ellenbrook Line Part 2, Perth, WA

I am writing to you in relation to your proposal to develop part 2 of the Morley-Ellenbrook rail line, in Perth WA. The Proposed Action was referred and assessed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) for its impacts on listed threatened species and communities (sections 18 & 18A).

Where possible the Department of Agriculture, Water and the Environment is committed to reducing the regulatory burden on approval holders and seeks to closely align conditions of approval with the final WA Government approval. To ensure this, I request that you provide a copy of the final WA Government Ministerial Statement of approval.

Under section 132 of the EPBC Act, the assessment clock will be stopped until the requested information is provided. No fees are payable for this stop clock decision.

The clock will restart once the final WA Government Ministerial Statement has been received.

If you have any questions about this decision, please contact the project manager, **s. 22(1)(a)(ii)** by email to **s. 22(1)(a)(ii)** [@awe.gov.au](mailto:s.22(1)(a)(ii)@awe.gov.au), or telephone **s. 22(1)(a)(ii)**

Yours sincerely

s. 47F(1)

Chris Videroni
Acting Assistant Secretary
Environment Assessments West (WA, SA, NT) Branch

10 November 2020

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

From: s. 47F(1) @pta.wa.gov.au>
Sent: Wednesday, 9 December 2020 1:03 PM
To: s. 22(1)(a)(ii)
Cc: s. 47F(1)
Subject: FW: METRONET Morley-Ellenbrook Line - Trithuria occidentalis

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

PTA has received the below response from *Trithuria occidentalis* specialist s. 47F(1) . s. 47F(1) conclusion is the *Trithuria occidentalis* is unlikely to occur in the Development Envelope and there is only a small possibility that it occurs adjacent to the Development Envelope.

We will follow up with s. 47F(1) questions about what specific knowledge was possessed or preparation was done concerning identification of *T. occidentalis* or its habitat and get whatever further information we can obtain from PTA's consultant back to him.

I hope this helps with your deliberations.

Please get back to me should you require further information or wish to discuss.

Kind regards

s. 47F(1)**Senior Environmental Planner | IPLS**

Public Transport Authority of Western Australia
 34-50 Striling Street, Perth Business Centre, WA, 6849
 Tel: (s. 47F(1)) Fax: s. 47F(1) Mob: s. 47F(1)
 Email: s. 47F(1) @pta.wa.gov.au
 Web: www.pta.wa.gov.au



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From: s. 47F(1) @dbca.wa.gov.au>
Sent: Tuesday, 8 December 2020 3:43 PM
To: s. 47F(1) @pta.wa.gov.au>
Cc: s. 47F(1) @pta.wa.gov.au>; s. 47F(1) @ghd.com>
Subject: RE: METRONET Morley-Ellenbrook Line - Trithuria occidentalis

s. 47F(1)

Public Transport Authority of Western Australia

Dear **s. 47F(1)**

I have read the information, attachments and links that you provided with your query about the plant *Trithuria occidentalis*.

This species appears to have quite specific habitat requirements: seasonally inundated clay-based wetland in lay soil that is either open or has open areas between shrubs, especially *Melaleuca lateritia* and without significant weed invasion. My understanding from the supplied information is that there were no sites that matched these conditions within the Development Envelope.

One site that you refer to that is within Whiteman Park immediately adjacent to the Development Envelope, a small wetland with the vegetation type Mr.Mi.Tl.As, is a possible site for the species but the available information is insufficient for me to judge the likelihood. It is a seasonal wetland but the soil type is not clear and the list of species noted was very short and included few species that could be considered associates of *Trithuria occidentalis*. I do not know whether the list was intended to be complete – I suspect not. On the face of it, this site does not seem promising as a habitat for *T. occidentalis*, although being the only noted occurrence of this vegetation type within the area, it is of conservation interest.

Trithuria occidentalis is a difficult species to identify because of the small plant size and its similarity to a related species, *T. submersa*. No *Trithuria* species were recorded during the vegetation searches, which supports the idea that there are no suitable habitats within the Development Envelope. Occurrence of *Trithuria* species is dependent on seasonal conditions so searches would not find them in unfavourable (dry) seasons, and it is not clear what the season was like when the searches were done. However the overall work covered more than one year. You have informed me that the search for *T. occidentalis* was carried out by experienced botanists, but it is not stated what specific knowledge was possessed or preparation was done concerning identification of *T. occidentalis* or its habitat. Consequently I can't assess the level of competence of the work *T. occidentalis* other than by the general quality of the site descriptions and species lists, which I consider to be competent.

I would like to clarify the FloraBase records of *Trithuria occidentalis*. Currently there are two locations known for this species: Ellenbrook Nature Reserve (synonym J.R. & B. Martyn Reserve) and Koodjee Nature Reserve. A third site of modern times, Warbrook Siding (probably = Twin Swamps Nature Reserve), is now thought to have lost the species through environmental change including weed invasion and water changes. The Midland Junction collections are of unknown exact location and probably were from sites subsequently lost to agricultural and urban development.

My conclusion is that *Trithuria occidentalis* is unlikely to occur in the Development Envelope and there is only a small possibility that it occurs adjacent to the Development Envelope.

Regards

s. 47F(1)

Senior Research Scientist
Western Australian Herbarium

Biodiversity and Conservation Science,
Department of Biodiversity, Conservation and Attractions (DBCA)
Locked Bag 104, Bentley Delivery Centre, WA 6983, Australia

Ph **s. 47F(1)**

From: **s. 47F(1)** <@pta.wa.gov.au>

Sent: Friday, 27 November 2020 9:30 AM

To: **s. 47F(1)** <@dbca.wa.gov.au>

Cc: s. 47F(1)

@pta.wa.gov.au; s. 47F(1)@ghd.com>Subject: METRONET Morley-Ellenbrook Line - *Trithuria occidentalis*

[External Email] This email was sent from outside the department – be cautious, particularly with links and attachments.

Hi s. 47F(1)

Thank you for your time on the phone the other day. The PTA is seeking your comment and feedback on the likelihood of *Trithuria occidentalis* within and adjacent to the Morley-Ellenbrook Line (MEL) Development Envelope. Please find a summary below and attached of the information collected to date, and the detailed/targeted survey effort across the Development Envelope. The PTA believes considerable survey effort has been undertaken across the MEL Development Envelope using experienced botanists, with no records of the *T. occidentalis* species identified. A suitably qualified person has reviewed the vegetation types and it is considered that there is one potentially suitable habitat area which is outside our proposed footprint. The PTA has received a draft condition by the Department of Agriculture, Water and Environment (DAWE) to survey for the *T. occidentalis*, prior to the development of the MEL Proposal.

Please find a link to the RPS Consolidated Detailed Flora Vegetation Report (refer to Appendix D [Malaga to Ellenbrook Rail Works | EPA Western Australia](#)) and the attachment of Figure 12 from the MEL Environmental Review Document to support the below information.

The PTA would appreciate your review and feedback on the information provided in this email, to determine whether it is likely, or even possible, that the species is present within or adjacent to the Development Envelope?

Summary of likelihood

The Department of Agriculture, Water and the Environment (DAWE) Protected Matters Search Tool (PMST) report identified four Threatened flora species that potentially occur in the MEL Development Envelope including *Andersonia gracilis*, *Eleocharis keigheryi*, *Lepidosperma rostratum* and *Trithuria occidentalis*. The DBCA database returned only two of these species: *Eleocharis keigheryi* and *Trithuria occidentalis*, which were assessed as having a 'moderate' 'likelihood of occurrence' within the flora and vegetation survey area based on proximity of known records and the potential for suitable habitat to be present (RPS 2020). A thorough search was conducted for both species as part of the targeted wetland flora surveys in spring 2019 and neither species were recorded. Searches for these species were undertaken during targeted wetland flora surveys in spring 2019, which included traversing riparian vegetation along Bennett Brook and West Bennett Brook (RPS 2020). In addition, the detailed flora and vegetation assessment undertaken by RPS has included field surveys in spring 2017, 2018 and 2019. Following this considerable survey effort, *Trithuria occidentalis* is considered unlikely to occur in the Development Envelope.

Survey effort

A number of reconnaissance, detailed, targeted and wetland vegetation monitoring surveys have been completed across the MEL Development Envelope and broader MEL survey area. A summary of the survey effort is provided below and in section 1.3 of RPS (2020).

Year	Survey dates
2017	Detailed Flora and Vegetation Assessment (incl Targeted Threatened and Priority survey) - 25, 26, 27, 30, 31 October 2017 and 13 November 2017.
2018	Detailed Flora and Vegetation Assessment (incl Targeted Threatened and Priority survey) – 19 & 20 October 2018 Targeted <i>Caladenia huegelii</i> survey – 28th September 2018 Reconnaissance Survey - several days in December 2018 and January 2019
2019	Detailed flora and vegetation survey (supplementary visit) – 17, 18 April 2019 Baseline Wetland Vegetation Monitoring – 17, 18 April 2019 and 7 May 2019 Targeted <i>Caladenia huegelii</i> survey – 26, 27 & 28 September 2019 Detailed Flora and Vegetation Assessment (incl Targeted Threatened and Priority survey) – 15, 16, 17 October 2019.

Review of *Trithuria occidentalis* habitats and habitats in the MEL DE

A review of NatureMap (DBCA 2007–) indicates *Trithuria occidentalis* is known from three locations including Koodjee Nature Reserve (located north of Bindoon), Ellenbrook Nature Reserve J.R. & B. Martyn Reserve, Ellen Brook (15 km N of Midland, c. 5-7 km north-east of the Development Envelope) and Midland Junction (likely to be south of the Development Envelope). A review of specimen data from FloraBase (WA Herbarium 1998–) indicates collections from Koodjee Nature Reserve, Ellenbrook Nature Reserve and from J.R. & B. Martyn Reserve, Ellen Brook are from low lying depressions and wet-winter clay pans with individuals recorded in clay substrates, either submerged, partially submerged or in drying clay. Collections made from the Midland Junction area are dated 1898 and 1901, and have no details on habitat.

A review of the flora and vegetation survey report completed by RPS indicates one vegetation type Mr.Mi.Tl.As that may provide suitable habitat for *Trithuria occidentalis*. This vegetation type is described as *Melaleuca raphiophylla* Low Woodland over *M. lateritia*, *Taxandria linearifolia* and *Astartea affinis* Tall Shrubland over *Centella asiatica* Low Forbland on wetland fringe and standing water in wetland. This vegetation type occurs outside of, but adjacent to the MEL development envelope and indicative footprint (western end) and is rated Excellent in condition.

The vegetation types in the vicinity of Bennett Brook included *Eucalyptus rudis* wetland / dampland (Er., Er.Mr. and Er.Mr.As/Tl). This vegetation occurred along the banks (floodplains) of Bennett Brook, extending onto the palusplains. This vegetation is dominated by Flooded Gum (*Eucalyptus rudis*) and is associated with Bennett Brook as well as a number of large wetland areas outside of the MEL development envelope and indicative footprint. Within the DE, these areas are generally characterized by sandy soils. Targeted surveys by RPS (2020) did not locate *Trithuria occidentalis* in the Bennett Brook area.

We look forward to receiving your comments and input. Please do not hesitate to give me a ring to discuss further.

Thanks

s. 47F(1)

Senior Environmental Planner | IP&LS

Public Transport Authority of Western Australia
Office of Major Transport Infrastructure Delivery
34 - 50 Stirling Street Perth 6000

Tel: s. 47F(1)

Email: s. 47F(1) [@pta.wa.gov.au](mailto:s.47F(1)@pta.wa.gov.au) | Web: www.pta.wa.gov.au



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