

Attachment 3 – The PTA’s response to the Department of the Environment and Energy’s comments regarding the proposal.

Attachment 3 – PTA Response to the Department of the Environment and Energy’s Comments

Department of the Environment and Energy (DoEE) comments on TCL proposal	Public Transport Authority’s (PTA) response
<p>Banksia Woodlands TEC</p> <p>The Department notes that the Referral Information with Additional Information states 2.32 ha of Banksia Woodlands TEC will be directly impacted as a result of the proposed action and that section 11.5 states that quantifying the indirect impacts is not possible.</p> <p>Indirect impacts are outlined in sections 6.6.8 and 7.6.8.</p> <p>The Department requests that all the indirect impacts (as mentioned in sections 6.6.8 and 7.6.8) are further addressed. This would include discussion specific to the magnitude and duration of impacts. Please also consider indirect impacts such as surface water changes as a result of carparks, foot traffic through vegetation to access stations quicker etc. While quantification may not be feasible, you should consider providing qualitative information that characterises the type and possible maximum extent of indirect impacts.</p> <p>Should the Department not be provided with this information it may adopt the precautionary approach whereby the entirety of all four Banksia Woodlands TEC patches (including that outside the development envelope) is considered to be impacted by the proposed action.</p> <p>The Department questions whether patch 3 and 4 are a single patch which has historically been fragmented by a road.</p> <p>The <i>Approved Conservation Advice (incorporating listing advice) for the Banksia Woodlands of the Swan Coastal Plain ecological community</i> identifies both Swan Coastal Plain Banksia attenuata – Banksia menziesii woodlands (FCT23a) TEC and Low lying Banksia attenuata</p>	<p><u>Indirect impacts</u></p> <p>Indirect impacts to the Banksia Woodlands of the SCP TEC are presented in Attachment 10 – Matters of National Environmental Significance (MNES) Additional Information Report.</p> <p><u>Patches 3 and 4</u></p> <p>The <i>Approved Conservation Advice (incorporating listing advice) for the Banksia Woodlands of the SCP TEC</i> (Threatened Species Scientific Committee (TSSC) 2016) defines a patch as: ‘a discrete and mostly continuous area of the ecological community that may include small-scale (<30m) variations, gaps and disturbances such as tracks, paths or breaks, or localised variations in vegetation that do not significantly alter the overall functionality of the ecological community.’</p> <p>Patches 3 and 4 are defined as independent patches as they are separated by a dual carriageway Ranford Road reserve with a gap of approximately 42 m.</p> <p><u>Low lying Banksia attenuata woodlands or shrublands (FCT 21c) PEC</u></p> <p>During field surveys one vegetation type (VT01) was assessed as meeting the key diagnostic characteristics for the Banksia Woodlands of the SCP TEC as outlined in (TSSC 2016). A total of 2.32 ha of VT01 was classified as Banksia Woodlands TEC within the development envelope as it meets the minimum condition threshold and patch size requirements as per TSSC (2016).</p> <p>At some locations patches of VT01 do not meet the key diagnostic</p>

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<p>woodlands or shrublands (FCT 21c) PEC as Banksia Woodlands TEC. The Department requests that Low lying Banksia attenuata woodlands or shrublands (FCT 21c) PEC be included into the Banksia Woodlands TEC and that the Referral Information with Additional Information be revised accordingly.</p>	<p>criteria for the Banksia Woodlands of the SCP TEC due to the absence of a Banksia overstorey (as per page 19 of TSSC 2016), and therefore were only defined as the Banksia Woodlands PEC (FCT 21c). In addition, some patches do not meet the minimum condition threshold (at least Good condition as per page 22 of TSSC 2016) and minimum patch sizes (at least 2 ha for vegetation in Good condition (as per page 23 of TSSC 2016) for the Banksia Woodlands TEC.</p> <p>A total of 1.56 ha of VT01 was therefore classified as the Banksia Woodlands PEC (FCT 21c) as the remaining patches did not meet the following:</p> <ul style="list-style-type: none"> • Key diagnostic criteria; • Minimum condition threshold as it is in Degraded or worse condition; and • Minimum patch size requirement as each of the four distinct patches are less than 2 ha (as the minimum patch size for a patch in Good condition). <p>Following recent consultation with the Department on 25 June 2019, the PTA undertook further analysis to revise the area of TEC to include additional patches of PEC. The additional patches of PEC are included as TEC in consideration of section 2.2.4 of the Approved Conservation Advice (TSSC 2016) – <i>Further information to assist in determining the presence of the ecological community</i>, in particular:</p> <ul style="list-style-type: none"> • Where the patch of PEC is mostly continuous with a patch of the TEC (page 23, TSSC 2016). • Where the patch of PEC falls within a buffer zone that is contiguous area immediately adjacent to a patch of the TEC that is important for protecting its integrity (page 24, TSSC

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	<p>2016).</p> <p>The PTA undertook an analysis of the patches of VT01 defined as PEC within the development envelope, these were:</p> <ul style="list-style-type: none"> • Patch 1 (adjacent to Kwinana Freeway) – approximately 0.65 ha • Patch 2 (rail corridor adjacent to Training Place in Jandakot) – approximately 0.10 ha • Patch 3 (western side of Ranford Road) – approximately 0.57 ha • Patch 4 (western side of Ranford Road) – approximately 0.22 ha • Patch 5 (very small area in rail corridor east of Caladenia Grove Wetland Reserve) – approximately 0.02ha <p>Individual assessment of these five patches determined that two patches (Patch 1 and 2) are not surrounded by or connected to any patches of TEC, and therefore these patches will still be designated as PEC.</p> <p>The remaining three patches (Patches 3, 4 and 5) were identified as being connected to adjacent areas of TEC, and have therefore been revised to TEC (shown in the attached Figure).</p> <p>In addition, to minimise vegetation impacts the development envelope has been reduced at Ranford Road Station. See Attachment 7 – Ranford Road Station Additional Information Report for further detail.</p> <p>Therefore the revised total area of Banksia Woodlands of the SCP TEC within the development envelope is 2.87 ha.</p>

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<p>Black Cockatoos</p> <p>The Department notes that the Referral Information with Additional Information states 24.59 ha of Carnaby's black cockatoo (<i>Calyptorhynchus latirostris</i>) and 17.29 ha of Forest red-tailed black cockatoo (<i>Calyptorhynchus banksii naso</i>) and Baudin's cockatoo (<i>Calyptorhynchus baudinii</i>) foraging habitat will be directly impacted as a result of the proposed action. The Referral Information with Additional Information states that 48 potential breeding tress may be included in the area to be cleared as part of the proposed action.</p> <p>In addition, section 11.7.1 states that quantifying the indirect impacts is not possible.</p> <p>As discussed above (see Banksia Woodlands TEC comments) please address the indirect impacts outlined in sections 6.6.8 and 7.6.8.</p>	<p><u>Indirect impacts</u></p> <p>Indirect impacts to the foraging habitat and potential breeding trees for Carnaby's black cockatoo (<i>Calyptorhynchus latirostris</i>), Forest red-tailed black cockatoo (<i>Calyptorhynchus banksii naso</i>) and Baudin's cockatoo (<i>Calyptorhynchus baudinii</i>) are presented in Attachment 10 – Matters of National Environmental Significance (MNES) Additional Information Report.</p>
<p>Grand spider orchid</p> <p>The <i>Grand spider orchid</i> (<i>Caladenia huegelii</i>) <i>recovery plan</i> states: ...habitat critical to the survival of the Grand spider orchid includes...areas of similar habitat surrounding important populations (i.e. jarrah/banksia woodland on Bassendean sands), as these areas provide potential habitat for natural range extension and are necessary to support viable populations of the associated mycorrhizal fungus and the pollinating wasp species crucial to the orchid's survival, and to allow pollinators to move between populations; and additional occurrences of similar habitat that may contain important populations of the species or be suitable sites for future translocations or other recovery actions intended to create important populations.</p> <p>The Department considers significant residual impacts to Grand spider</p>	<p><u>Indirect impacts</u></p> <p>Indirect impacts to <i>Caladenia huegelii</i> habitat is presented in Attachment 10 – Matters of National Environmental Significance (MNES) Additional Information Report.</p> <p>The proposed development is located adjacent to areas known to contain large populations of <i>Caladenia huegelii</i> and its supporting habitat. While is it not considered that the current development envelope directly impacts known populations of <i>C. huegelii</i>, in accordance with definitions within the Grand Spider Orchid (<i>Caladenia huegelii</i>) Interim Recovery Plan 2008-2013 (Australian Government, 2008) it is considered that there may be impacts to habitat important (previously termed 'critical') to the survival of the species. As such,</p>

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<p>orchid habitat as a result of the proposed action likely.</p> <p>The Department notes section 6.6.71 of the Referral Information with Additional Information states that given the isolation of the potential habitat in the development envelope, it does not meet the definition of 'critical habitat' and therefore does not require offsetting. We disagree, and consider an offset may be required - please discuss this further.</p> <p>As discussed above (see Banksia Woodlands TEC comments) please address the indirect impacts are outlined in sections 6.6.8 and 7.6.8.</p>	<p>the following terms have been considered and applied to the assessment of potential environmental impacts to <i>C. huegelii</i> habitat:</p> <ul style="list-style-type: none"> • <u>Known habitat</u> – For the purpose of this assessment, known habitat is defined as areas of habitat where <i>C. huegelii</i> individuals have been recorded. As per the Interim Recovery Plan 2008-2013 (Australian Government, 2008) <i>C. huegelii</i> occurs in areas of mixed woodland of jarrah (<i>Eucalyptus marginata</i>), candlestick banksia (<i>Banksia attenuata</i>), holly banksia (<i>B. ilicifolia</i>) and firewood banksia (<i>B. menziesii</i>) with scattered sheoak (<i>Allocasuarina fraseriana</i>) and marri (<i>Corymbia calophylla</i>) over dense shrubs of blueboy (<i>Stirlingia latifolia</i>), Swan River myrtle (<i>Hypocalymma robustum</i>), yellow buttercups (<i>Hibbertia hypericoides</i>), buttercups (<i>H. subvaginata</i>), balga (<i>Xanthorrhoea preissii</i>), coastal jugflower (<i>Adenanthos cuneatus</i>) and <i>Conostylis</i> species. Throughout its range the species tends to favour areas of dense undergrowth. Soil is usually deep grey-white sand usually associated with the Bassendean sand-dune system. However, rare plants have been known to extend into the Spearwood system (in which calcareous yellow sands dominate) in some areas (Australian Government, 2008). • <u>Suitable habitat</u> – For the purpose of this assessment and based on targeted flora surveys, suitable habitat is defined as habitat on the Bassendean sand-dune system which contains vegetation suitable to support the species; however <i>C. huegelii</i> individuals were not recorded during surveys. • <u>Inferred suitable habitat</u> - For the purpose of this assessment, inferred suitable habitat is defined based on desktop assessment as habitat on the Bassendean sand-dune system which likely

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	<p>contains vegetation suitable to support the species however targeted flora surveys have not been conducted to confirm.</p> <ul style="list-style-type: none"> • <u>Supporting habitat</u> - Areas of similar habitat (to the species known habitat requirements) surrounding important populations (i.e. jarrah/banksia woodland on Bassendean sands) that provide potential habitat for natural range extension and are necessary to support viable populations of the associated mycorrhizal fungus and the pollinating wasp species crucial to the orchid's survival. This allows pollinators to move between populations; and additional occurrences of similar habitat that may contain important populations of the species or be suitable sites for future translocations or other recovery actions intended to create important populations (Australian Government, 2008). <p>In accordance with the above definitions, advice provided by the DBCA and within Australian Government (2008) and the <i>C. huegelii</i> survey effort, the PTA considers suitable habitat to be mapped and defined as:</p> <ul style="list-style-type: none"> • Containing <i>Banksia menziesii</i> and <i>B. attenuata</i> woodland (VT01), conducive with known <i>C. huegelii</i> habitat. <p>Supporting habitat defined as:</p> <ul style="list-style-type: none"> • <i>Banksia</i> spp. isolated trees <i>Regelia inops</i> <i>Hypocalymma angustifolium</i> shrubland (VT02a). • <i>Regelia inops</i> <i>Hypocalymma angustifolium</i> shrubland (VT02). <p>Based on these definitions, the development envelope will impact a total of 4.23 ha of <i>Caladenia huegelii</i> habitat comprised:</p> <ul style="list-style-type: none"> • 3.65 ha of <i>Banksia menziesii</i> and <i>B. attenuata</i> woodland (VT01) suitable habitat for <i>Caladenia huegelii</i>.

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	<ul style="list-style-type: none"> • 0.58 ha of <i>Banksia spp.</i> isolated trees <i>Regelia inops</i> <i>Hypocalymma angustifolium</i> shrubland (VT02a) and <i>Regelia inops</i> <i>Hypocalymma angustifolia</i> shrubland (VT02) supporting habitat for <i>Caladenia huegelii</i>. <p>Direct and indirect impacts to <i>Caladenia huegelii</i> are further presented and discussed in the following:</p> <ul style="list-style-type: none"> • Attachment 7 – Ranford Road Station report (PTA, 2019b) • Attachment 10 – Matters of National Environmental Significance Impacts report (Aurora Environmental, 2019b).
<p>Hydrology</p> <p>Please provide a discussion on the likely impacts to MNES (or their habitat) specifically in relation to the proposed hydrological modifications.</p>	<p>Further discussion on the likely impacts to MNES or their habitat is presented in Attachment 10 – Matters of National Environmental Significance (MNES) Additional Information Report.</p>
<p>Other</p>	
<p>As discussed a variation under s.156A of the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth) is required. Should the proposed action not be varied, the bilateral agreement (assessment by accredited assessment) would not be continued, as the proposal being assessed by the WA EPA will differ from the proposal under consideration by the Commonwealth.</p>	<p>The PTA will prepare a variation under s.156A of the EPBC Act to reflect changes made to the project under s43A of the <i>Environmental Protection Act 1976</i>. This variation is anticipated to be submitted to the DoEE in July 2019 following submission of this package of work.</p>
<p>The Department has undertaken a preliminary review of the proposed offset. If the proposed action is likely to result in a significant residual impact for any of the above mentioned MNES the proponent will need to offset the loss. The Department considers that the proposed offset as detailed within the Referral Information with Additional Information does</p>	<p>Following a discussion with the DoEE, it was identified that the proposed offset as detailed within the Referral Information with Additional Information does not meet the requirements of the Department's <i>EPBC Act</i> Environmental Offset Policy (October 2012) due to the:</p>

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<p>not meet the requirements of the Department's <i>Environment Protection and Biodiversity Conservation Act 1999</i> Environmental Offset Policy October 2012 (EPBC Act Offset Policy).</p> <p>The Department considers a discussion with the proponent (and DWER) may be the best way to start the resolution of this matter.</p>	<ul style="list-style-type: none"> • Omission of an environmental impact assessment of potential direct and indirect impacts to <i>Caladenia Huegelii</i>. • Lack of sufficient information to support the PTA's proposed use of Lowlands Road, Mardella as an offset site including: <ul style="list-style-type: none"> • Evidence the offset has been purchased and/or paid for and written support to use the site. • Evidence of the site's environmental values to present the offset's suitability to counterbalance impacts to MNES (i.e. consultant surveys). • Existing reports and assessments conducted by the DBCA on the site. • Agreement on and payment of Mardella management funding to the DBCA. • Clarity on the PTA's total contribution to Murdoch University to fund their Black Cockatoo Research proposal, which can be no greater than 10% of the project's total Black Cockatoo offset package. <p>The PTA's approach to addressing these three items is summarised below.</p> <p><u>Environmental Impact Assessment of Potential Impacts to <i>C. huegelii</i></u></p> <p>An assessment of potential direct and indirect impacts to <i>Caladenia huegelii</i> and avoidance and management measures to minimise impacts has been included in Attachment 7 - Ranford Road Report Station Report (PTA, 2019b) and Attachment 10 – Matters of National Environmental Significance Impacts report (Aurora Environmental,</p>

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	<p>2019b). Within this assessment, the PTA has formed a position that clearing of the following suitable and supporting <i>C. huegelii</i> habitat areas within the development envelope will result in a significant residual environmental impact to <i>C. huegelii</i> :</p> <p><u>Significant residual environmental impact to suitable <i>C. huegelii</i> habitat within Ranford Road development envelope:</u></p> <ul style="list-style-type: none"> • 2.62 ha of suitable <i>Banksia menziesii</i> and <i>B. attenuata</i> woodland (VT01) habitat for <i>Caladenia huegelii</i>. • 0.58 ha of supporting <i>Banksia spp.</i> isolated trees <i>Regelia inops Hypocalymma angustifolium</i> shrubland (VT02a) and <i>Regelia inops Hypocalymma angustifolia</i> shrubland (VT02) habitat for <i>Caladenia huegelii</i>. • Total: 3.20 ha. <p><u>Significant residual environmental impact to suitable <i>C. huegelii</i> habitat within the development envelope adjacent to Kwinana Freeway:</u></p> <ul style="list-style-type: none"> • 1.03 ha of <i>Banksia menziesii</i> and <i>B. attenuata</i> woodland (VT01). <p><u>Proposed <i>C. huegelii</i> offset:</u></p> <p>The PTA will provide a direct offset to counterbalance the significant residual environmental impacts to suitable <i>C. huegelii</i> habitat listed above. This equates to a total impact to 4.23 ha of suitable and supporting <i>C. huegelii</i> habitat.</p> <p>With reference to the Commonwealth offsets calculator and based on a C Huegelii vegetation quality rating of 7, the total quantum impact is 2.96 ha.</p> <p>A State-owned site in Mardella, referred to as Lowlands is proposed to</p>

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	<p>directly offset significant residual environmental impacts of the project including MNES. Mardella is also known to contain <i>C. huegelii</i> habitat and will be used to offset impacts to <i>C. huegelii</i>.</p> <p>With reference to the Commonwealth offsets calculator and based on calculator inputs including an assumed starting habitat quality of 7 at Mardella, the PTA is required to provide 26.03 ha suitable and supporting <i>C. huegelii</i> habitat as an offset.</p> <p>The PTA has engaged a consultant to conduct a survey of Lowlands to assess and map the extent of <i>C. huegelii</i> habitat within Lowlands. Preliminary information on the environmental values of the site indicates that there will be sufficient suitable and supporting <i>C. huegelii</i> habitat to meet the offset requirement. Funding will also be provided to the DBCA to manage <i>C. huegelii</i> habitat within Lowlands to improve habitat condition.</p> <p>The TCL Offset Strategy will be revised to include a discussion of the offset strategy for <i>C. huegelii</i>. In addition to a detailed chapter discussion of the proposed offset, the following information will be provided within the revised TCL Offset Strategy to support the PTA's proposal to offset impacts to <i>C. huegelii</i>, to be submitted to the State and Commonwealth for assessment:</p> <ul style="list-style-type: none"> • Verification that sufficient habitat extent is present within Mardella to put Mardella forward as an offset. • Final Commonwealth Offsets Calculator • WA Offsets Template • TCL Residual Impacts Significance Model (RISM) Table.

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	<p data-bbox="1167 293 1868 320"><u>Mardella Offset Site and Black Cockatoo Research</u></p> <p data-bbox="1167 339 2067 405">The PTA will provide the following separate package of information to the DoEE:</p> <ul data-bbox="1167 427 2067 788" style="list-style-type: none"> <li data-bbox="1167 427 2067 536">• Written evidence the Mardella offset site has been purchased and/or paid for and written State support to use the site to offset METRONET impacts including for TCL. <li data-bbox="1167 555 2067 620">• Existing reports and assessments conducted by the DBCA on the Mardella site. <li data-bbox="1167 639 2067 788">• Clarity on the PTA's total contribution to Murdoch University to fund their Black Cockatoo Research proposal, which can be no greater than 10% of the project's total Black Cockatoo offset package. <p data-bbox="1167 807 2051 834">The following evidence will be provided to the DoEE when available:</p> <ul data-bbox="1167 853 2067 1050" style="list-style-type: none"> <li data-bbox="1167 853 2067 919">• Agreement on and payment of Mardella management funding to the DBCA. <li data-bbox="1167 938 2067 1050">• Evidence of the site's environmental values to present the offset's suitability to counterbalance impacts to MNES (i.e. consultant surveys).

References

Threatened Species Scientific Committee (TSSC) (2016). *Environment Protection and biodiversity Conservation Act 1999* (EPBC Act) (s 266B) Approved Conservation Advice (incorporating listing advice) for the Banksia Woodlands of the Swan Coastal Plain ecological community

Figure - TEC Classification Update



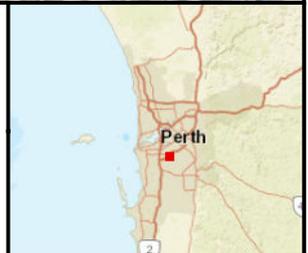
TEC Classification Update

Legend

- ▭ Final Development Envelope
- Banksia Woodlands of the Swan Coastal Plain TEC
- Revised to Banksia Woodlands of the Swan Coastal Plain TEC



Public Transport Authority



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