



### Document Review Comments Sheet

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| <b>Document Title:</b> | Greenbushes Lithium Mine Expansion – Response to EPA Notice of Decision to Assess: Additional Information Request (EPA Letters dated 16 and 30 August 2018) |
| <b>Review Date:</b>    | 22 November 2018/ 28 November to add comments for Offsets and additional comments on Flora and Vegetation and Terrestrial Fauna                             |

The Department of Water and Environmental Regulation (DWER) has reviewed the *Greenbushes Lithium Mine Expansion – Environmental Referral Additional Information October 2018* and associated Appendices (final version submitted 26<sup>th</sup> October 2018) against the EPA objectives for the key environmental factors of Flora and Vegetation, Terrestrial Fauna and Social Surroundings (Visual Amenity, Noise and Ground-borne Vibration). To inform EPA’s assessment of Air Quality, we have also reviewed the additional information on a peer review of the Dust Impact Assessment Report in Appendix G and Greenhouse Gas emissions. As part of this review, Terrestrial Ecosystem Branch, EPA Strategy and Guidance, Air Quality, Noise, Climate Change Branches of the DWER and the Department of Biodiversity Conservation and Attractions have been consulted and provided the following comments.

Please address the comments in the following table and update the *Greenbushes Lithium Mine Expansion – Environmental Referral Additional Information October 2018* and associated Appendices accordingly.

Of note is that the comments for Terrestrial Fauna are for your information only as they confirm that there is no need to amend those chapters relating to Terrestrial Fauna.

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| <b>Flora and Vegetation</b> | <p><u>Amendments required for Onshore 2018 survey report:</u></p> <ol style="list-style-type: none"><li>1. The Onshore 2018 survey report states “<i>The annual rainfall for the three-month period prior to the February/March 2018 and September/October 2018 field surveys was 77 mm and 455 mm respectively (Figure 3). This provided excellent survey conditions with a wide variety of plant taxa flowering across two seasons.</i>” However, Figure 3 to accompany this statement shows that the rainfall preceding the two surveys (Feb &amp; Aug-Sept 2018) was</li></ol> | <ol style="list-style-type: none"><li>1. Including the actual month that the survey commenced (i.e. Feb and Sep 2018) the four month preceding rainfall total for the Feb/March 2018 and Sep/Oct 2018 surveys are comparable to the long term averages. As flowering depends on an extended period of rainfall, the preceding 3-4 months of rainfall are considered to provide suitable conditions for surveying given rainfall was comparable (slightly lower) to long term averages.</li></ol> |

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|            | <p>almost nil and below average respectively. This inaccuracy is further reported in Table 2 Limitations and should be corrected.</p> <ol style="list-style-type: none"> <li>2. The species list provided in the report is sorted by introduced taxa followed by genus rather than plant family which makes interpretation difficult and should be corrected.</li> <li>3. The Species List includes 14 taxa which are not fully identified, and form 4% of the total native flora. The taxa that is not fully identified includes a few orchid taxa that require discussion. For example, the genus <i>Corybas</i> is not typical of Jarrah Forest, and more detailed discussion around its occurrence in the area and potential for significance is required.</li> <li>4. A figure should be included to show the GPS tracks of the on-foot traverses for conservation significant flora.</li> <li>5. Dieback status is currently only known from part of the development envelope; this has been responded to satisfactorily by Talison, however the additional information should include a discussion that the potential spread of dieback to adjacent high value conservation areas will be monitored and managed.</li> </ol> <p>In summary, the Onshore 2018 survey report requires revision to incorporate review comments to ensure it meets expectations for a comprehensive survey and inventory of the floristic values present within the survey area.</p> <p>The prime and protectable native vegetation for sustainable ecology is at the western and southern boundaries of the Mine Development Envelope and where it is continuous with State</p> | <ol style="list-style-type: none"> <li>a. Feb/March 2018 – actual = 78.0mm, long term average = 85.9mm</li> <li>b. Sep/Oct 2018 surveys – actual = 509.8mm, long term average = 568.7mm</li> <li>2. The species list has been adjusted and is now sorted by plant family.</li> <li>3. There were some taxa that remained with specialist taxonomists awaiting final IDs. This included all of the orchids, including the ‘<i>Corybas</i>’ mentioned. The <i>Corybas</i> was confirmed as <i>Cyrtostylis huegelii</i>. This survey appears to be the first record of <i>Hybanthus epacroides</i> in the southern jarrah forest (180 km range extension). This inconspicuous taxon was recorded in February 2018 predominantly because it was in flower (showy white flowers). This further supports appropriate seasonal conditions and reflects the importance of two season surveys.</li> <li>4. A track log for the survey has been included in the report. Note that one of the three GPS which were used had its track log overwritten so the plan only shows 2 of the 3 track logs.</li> <li>5. Discussion on dieback spread is included in section 4.5.2 of the Additional Information Report. As per the Conservation Significant Flora and Native Vegetation Management Plan (Appendix E) Talison intends to implement vegetation monitoring which will include multispectral analysis of the MDE. It is anticipated that this survey technique will identify areas where vegetation change is occurring which could potentially indicate</li> </ol> |

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|            | <p data-bbox="412 236 1216 371">Forest. Maintenance of these vegetated boundaries will help buffer the remaining native vegetation (especially State Forest) from impacts. The chapter addressing Flora and Vegetation should acknowledge this commitment.</p> <p data-bbox="412 395 1216 496">The EPA's objective for the flora and vegetation factor can be met if the site is managed to reduce indirect impact to native vegetation outside the development area.</p> | <p data-bbox="1339 236 2047 336">dieback spread which could then be further investigated. Talisison intend to extend the multispectral analysis of the MDE to include a buffer around the MDE.</p> <p data-bbox="1339 360 2047 639">Management measures for dieback are included in the Talisison Weed and Hygiene Management Plan (Appendix E) and are also summarised in Table 16 of the Additional Information document. Areas outside the MDE are outside the control of Talisison and may be subject to dieback introduction and or/spread from a range of vectors. Talisison therefore will only apply the management measures for dieback within the MDE which is area under its control.</p> <p data-bbox="1240 715 2047 1350">It is unclear whether additional mitigation is being requested through this comment and the extent of the area the comment refers to. The mining operation includes existing and proposed infrastructure at the western and southern boundary of the MDE (i.e. disturbance has either already occurred or will be undertaken as part of the Proposal either at or near these boundaries). There doesn't appear to be a continuous buffer or boundary to the surrounding State Forest which could be maintained. The surrounding State Forest is managed by DBCA and therefore Talisison has limited jurisdiction to undertake actions outside the MDE. As per the mitigation actions in Table 16 Talisison will implement the Conservation Significant Flora and Native Vegetation Management Plan (Appendix E) which includes vegetation monitoring (inclusive of baseline monitoring to detect changes) which is expected to identify changes in vegetation condition which could potentially be attributable to indirect impacts. Talisison will also implement the mitigation actions listed in Table 16 to minimise indirect impact outside of the 350 ha</p> |

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|                          |   | development footprint.  |
| <b>Terrestrial Fauna</b> | <p><u><i>No amendments are required for the additional information related to Terrestrial Fauna except noting the text in RED.</i></u></p> <p><b>Short – range endemic invertebrate fauna</b></p> <p>While the information included in Appendix B does not provide additional information to quantify the habitat types surveyed for SREs, the information provided is generally adequate to assess the impacts to terrestrial fauna.</p> <p><b>Western Ringtail Possum</b></p> <p>Section 5.3.6 of the Environmental Referral Additional Information October 2018 has been updated and satisfactorily clarifies the potential occurrence of Western Ringtail Possum and impacts to the species’ habitat in the mine development envelope.</p> <p><b>Black Cockatoos</b></p> <p>The revised count of 30 for number of suitable hollows is consistent with the numbers provided in the revised classification in Appendix C (see raw data Page 44 and summary table Page 96).</p> <p>The Mitigation outlined in the response, and as presented in Section 5.6 of the Environmental Referral Additional Information 2018 and Section 2.4.1 of Appendix E, is appropriate for black cockatoos.</p> <p><b>As part of the mitigation hierarchy, it is recommended that:</b></p> <ul style="list-style-type: none"> <li>- Talisn avoids known or suitable hollows as part of refining the location of the other infrastructure (roads, pipelines, powerlines, explosives and mine services area), and impacts to the two recorded roost sites; and</li> <li>- Where areas where not included in the 2018 survey(s) (i.e.</li> </ul> | <p>Further update has been made to section 5.3.6 and 5.5.1 (Western Ringtail Possum) based on a field survey of the MDE by Onshore Environmental for WRP habitat. The survey was undertaken to further clarify the availability of suitable WRP habitat within the MDE (the additional report is included in Appendix D). The survey involved active searching for evidence of WRP (such as scats or dreys, none were found however there were a few sightings of the Common Brushtail possum), and assessment of the suitability of the habitat for WRP. Based on the outcome of the field assessment the vast majority of the MDE was characterised as unsuitable for WRP. This was largely due to the lack of dense well-connected mid-storey and upper-storey vegetation, and/or lack of mature trees due to historical logging and post-mining rehabilitation. Some small areas of remnant bush were considered to provide poor or marginal habitat for WRP and for the purposes of impact assessment has been considered as possible habitat (18 ha). The habitats contained large old Eucalyptus trees, but lacked mid-storey structure and canopy connectivity that WRPs require.</p> <p>No hollows suitable for Western Ringtail Possum were identified during the survey. Observed hollows were not of a suitable size and/or were within areas of open vegetation that lacked the connectivity between the mid-storey and canopy (which is required to provide suitable habitat).</p> <p>As per Talisn’s Conservation Significant Fauna Management Plant (included in Appendix E) Talisn has committed to avoiding known and suitable hollows outside the TSF4, and Floyd’s WRL footprints as well as the roost sites. Tree protection zones will be implemented around the remaining trees with known and suitable hollows and the roost sites. The areas which will be avoided are</p> |

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|   | <p>the mine services area), Talisn will undertake pre-clearance surveys to ensure avoidance measures can be guaranteed.</p> <p>The EPA's objective for the terrestrial fauna factor can be met if the site is managed in accordance with the above documents.</p>  | <p>identified in Figure 4 of the Plan.</p> <p>The Plan also includes the following management target in relation to hollows: <i>No loss of hollows associated with secondary infrastructure such as roads, services areas, buildings, pipelines etc.</i></p> <p>A black cockatoo survey of the Mine Services Area has been completed by Tony Kirkby and included in Appendix C. Three hollows were identified within the area however based on the size of each hollow they are considered unsuitable for nesting. Sections 5.3.5 and 5.5.1 have been updated to include the results of this additional survey. Three hollows were found during the survey however based on drone and pole camera survey of the hollows all were determined to be unsuitable due to their shallow depth.</p> |
| <p><b>Social Surroundings (Noise and Vibration)</b></p> | <p><b>Noise</b></p> <ul style="list-style-type: none"> <li>We note that the Herring Storer Acoustics (HSA) completed a revised acoustic assessment report in September 2018. The revised report, proposes noise bunds at two locations – one to the northern end of the existing ROM and the other consisting of an extension of the existing noise bund providing a barrier to the north (Greenbushes). The height of the bunds vary dependent to the topography, however are generally around 10 m high or higher.</li> <li>The Environmental Noise Branch considers that the methodology of the noise assessment was correct and the predicted results in the updated noise report and the noise modelling, were reliable.</li> </ul> <p><u>Amendment required for Noise Management Plan as below:</u></p> <p>The updated Noise Management Plan included in HSA's Report should be updated to include more noise mitigation measures,</p> | <p>The noise management plan has been updated to include a review of noise bund requirements around the ROM Pad and installation of additional or expanded noise bunds where required based on the outcome of the review.</p>  |

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|                       | <p>ensuring compliance with the 50 dB(A) criteria for night operations. These include: increasing the height of the existing noise bunds, and/or installing noise bunds around the crushing operation areas etc.</p> <p><b>Blasting</b></p> <ul style="list-style-type: none"> <li>• George Boucher Consulting (GBC) prepared the blast-induced ground vibration and air over pressure report.</li> <li>• Based on GBC's prediction, the blast-induced ground vibration levels would comply with a peak particle velocity of 5mm/s at all sensitive premises in the town of Greenbushes.</li> <li>• As blasting activities in the proposed Greenbushes Expansion will be at least 400m from the closest sensitive receiver/neighbour, this predicted result seems reasonable. GBC has also predicted that the over pressure level generated by the blasting activities of the proposed Greenbushes Expansion will comply with the approved blast criteria specified in the Reg. 17 Approval. This predicted result also seems reasonable and reliable.</li> </ul> |  |
| <b>Air Quality</b>    | Advice on Air Quality will be sent to Talison separately as this information is not yet available.  | GHD has provided separate comments in reponse to the queries raised in the Advice. Minor updates to the Dust Impact Assessment report have been made to include some of the additional information required to address some of the comments received. There has been no change to the modelling or results predicted from the modelling and reported in the impact assessment. The updated report is included in Appendix F. |
| <b>Greenhouse Gas</b> | <p><u>Amendments required for Appendix G:</u></p> <ul style="list-style-type: none"> <li>• Based on the information provided in Appendix G, the</li> </ul>  | The Greenbase Greenhouse Gas emission assessment has been updated to include historical emissions for the 2017 and 2018 report period and additional line items have been added to the   |

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|            | <p>emission estimates for 'incidental sources' cannot be assessed. Please provide historical emissions data from the facility's NGER reports for 2017 and 2018.</p> <ul style="list-style-type: none"> <li>The greenhouse estimates presented in the additional information, do not include emission activities that may occur during the development phase of the project, for example, from clearing of native vegetation and the construction of additional production facilities. Please include emission activities in all stages of the project in Appendix G.</li> </ul> | <p>report to specify emissions associated with development activities for the Mine expansion. This has resulted in a minor change to the predicted emissions during the construction period but does not affect the predicted emissions in the peak year (2028-29 reporting period) as development activities will be complete.</p> |

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| <p><b>Offsets</b></p> | <p><i>Amendments required for Chapters relevant to offsets:</i></p> <ul style="list-style-type: none"> <li>- References to DBCA managing offset land parcels as State forest and under the Forest Management Plan should be amended in the documentation to state that DBCA intends to manage the offset land parcels consistent with the CALM Act which includes management for the purposes of conservation (e.g. threatened fauna habitat).</li> <li>- if the residual impacts of the proposal are determined to be acceptable, DBCA is further consulted on the proposed offsets. This is considered necessary because the offsets relate to impacts on matters that DBCA has responsibilities for and there are likely implications for DBCA relating to the management of lands included in the offsets package.</li> <li>- the offsets proposal includes the proposition that property S (located near Wilga) is to be covenanted and managed by the Blackwood Basin Group. This property is located within an enclave of DBCA-managed land and would be a useful addition to DBCA management both in terms of improving management boundaries and in terms of the conservation values present (both Carnaby's and red-tailed black cockatoos evidence observed). This should be amended in the documentation.</li> <li>- The provision of funds up to \$500,000 to the red-tailed black cockatoo recovery team is supported. However, please note that there are two recovery teams for threatened black cockatoos, the Carnaby's black cockatoo recovery team and the Baudin's and forest red-tailed black cockatoo recovery team. This should be corrected throughout the documents.</li> <li>- Funding to implement recovery actions is likely to provide significant benefit to the species' and may include actions other than research.</li> </ul> | <ul style="list-style-type: none"> <li>- Updates have been made throughout Chapter 9 and Appendix L (Offset Proposal) to amend to management of the offset land consistent with the CALM Act.</li> <li>- Talison has been in close consultation with DBCA in relation to offset land parcels, working with the Department to find land parcel's that meet both the requirements of the offset and are suitable properties for inclusion in the conservation estate. Talison intend to continue to consult closely with DBCA throughout the process of further assessing the land parcels, and determining management requirements for these.</li> <li>- All three properties will be acquired and vested with DBCA. Chapter 9 and Appendix L have been updated to reflect this.</li> <li>- Noted. This indirect offset approach has been revised and amended and funding will now be split between two programs detailed in Chapter 9 and Appendix L. In recognition of the comment following the indirect offset program has been amended to include funding towards Citizen Science, environmental restoration and maintenance projects relating to Black Cockatoos.</li> </ul> |



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| <p><b>Has the residual significance model for all direct and indirect impacts been applied and rationale to support the quantum of proposed offsets been provided?</b></p> | <p>It is noted that the documentation provided considers impacts to fauna habitat as the only significant residual impacts of the proposal. In applying the Residual Impact Significance Model (Table 33), the following changes are required (in order of importance):</p> <ul style="list-style-type: none"> <li>• All impacts should be quantified in the table, for example in “hectares of habitat” or “number of species”. It is preferred that species and impacts are listed as separate dot points in the table and discussion in the table is moved to Section 9.1.</li> <li>• Habitat for fauna - the list of species appears to be inconsistent with the list presented on the previous page and in the fauna chapter. Additionally, it is unclear why no offset has been proposed for species listed as requiring an offset in this table (e.g. Brush Tailed Phascogale).</li> <li>• Habitat for fauna – clarify whether impacts to each black cockatoo species is breeding, foraging or roosting habitat (if all, quantify the extent of each) and include the loss of suitable hollows.</li> <li>• Conservation areas – consistent with the WA offsets guidelines, impact to areas managed for conservation are considered significant residual impacts. The proposal is within State Forest managed for conservation, and this should be recognised in the table by listing it under “significant residual impacts that will require an offset”. This discussion in the table regarding excision of State Forest Area should be moved to Section 9.1.</li> <li>• Flora - include impacts to <i>Caladenia harringtoniae</i> (Pink Spider Orchid) and the Priority 4 species <i>Acacia semitrullata</i>, including an assessment of whether this impact is considered significant by placing it in the appropriate row in the table (including whether there is any uncertainty regarding impact,</li> </ul> | <ul style="list-style-type: none"> <li>• The residual impact significance table (Table 33) has been amended to include impacts for separate species and further discussion of the impacts has been moved to after the table.</li> <li>• The Brush tailed phascogale is now included in the offset Proposal and discussed in Chapter 9</li> <li>• More discussion has been included to clarify impacts to the three cockatoo species (9.1.4). While it is not known which species is utilising the breeding habitat at Greenbushes, based on foraging evidence and species behaviours it is highly likely to be the Forest Red-tailed Black Cockatoo.</li> <li>• The impact to State Forest has been moved into the significant residual impact line of the table and further discussion has been moved to a separate section following (9.1.3)</li> <li>• Updates and further discussion have been including relating to impacts to <i>Caladenia harringtoniae</i> (Pink Spider Orchid) and the Priority 4 species <i>Acacia semitrullata</i>. (9.1.1)</li> </ul> |

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|            | <p>refer to p10 of the WA offset guidelines).</p> <ul style="list-style-type: none"> <li>• Ecological communities – Table 33 currently only addresses EPBC listed TECs. Clarify whether there are any impacts to WA-listed TECs or PECs. If there are no impacts this should be clearly stated.</li> <li>• Remnant vegetation – list all vegetation communities impacted by the proposal, include vegetation condition.</li> </ul> <p>In addition, the following errors should be corrected in Section 9.1 of the document:</p> <ul style="list-style-type: none"> <li>• Include discussion regarding impacts to all environmental values consistent with the updated Table 33 (see previous comments).</li> <li>• Include the quantum of the residual impact to each species or environmental value.</li> <li>• The three black cockatoo species should be listed separately, including whether impacts are to breeding, foraging or roosting habitat. Address impacts to suitable hollow trees.</li> <li>• Clarify whether Western Ringtail Possum habitat is considered “suitable habitat” or “critical habitat” as there appears to be an inconsistency with other sections of the document.</li> <li>• The document addresses both State and Commonwealth listed species. It is recommended that where the conservation significance of a species is identified the proponent also identifies whether this is a State or a Commonwealth listing, or both.</li> </ul> | <ul style="list-style-type: none"> <li>• Table 33 has been updated to address this.</li> <li>• Table 33 has been updated to address this.</li> <li>• Talisson has noted and addressed the following points in Chapter 9.</li> </ul> |

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| <p><b>Use of the Commonwealth Offsets Calculator</b></p> | <p>It is understood additional assessment of the proposed offset properties is currently being undertaken and this is likely to change the values used in the calculator. Specific comments on the values likely to change have not been included. Copies of the additional detailed site assessments should be provided to inform the offsets assessment.</p> <p>The following comments are in addition to those comments provided by DoEE.</p> <ul style="list-style-type: none"> <li>• Please complete the Commonwealth Offsets Calculator for the removal of suitable hollows for black cockatoos.</li> <li>• Section 9.2 Offset calculation – this section related to determining the quantum of impact using the offsets calculator, not the calculation of the offset as stated. It would be more useful if Tables 34 and 38 are moved to Appendix L, to accompany the completed EPBC offsets calculators.</li> <li>• Table 38 – Risk of loss without offset – Properties L, R &amp; W – if the properties are not currently protected or managed for conservation, it is likely that a 5% risk of loss without offset is too low and should be revised.</li> </ul> <p>A number of tables in the Additional Information document and Appendix L relate to the values chosen for use in the calculator. These should be located with the offsets calculator in Appendix L for clarity.</p> | <ul style="list-style-type: none"> <li>• As it is not yet known how many hollows are located within each proposed offset property Talisson is unable to determine how many hollows can be offset through the proposed direct offsets. This will be confirmed and calculators completed during the detailed site assessment.</li> <li>• Information in Chapter 9 has been reduced to summarise the details of the offset proposal in Appendix L (which has been expanded to include some of the information which was in Chapter 9)</li> <li>• Risk of loss values have been revised in Appendix L.</li> </ul> |

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| <p><b>Offset proposal</b></p> | <p>It is unclear why the offsets proposed have not considered the significant residual impacts to all values listed in Table 33. Section 9.3 Offsets proposal is not clear as to how each proposed offset reasonably relates to the significant residual impacts of the proposal (as identified in Table 33).</p> <p>The following further information is required for each proposed offset:</p> <ul style="list-style-type: none"> <li>• Proposed offset project - details of offset projects, related management activities and stakeholder consultation undertaken, and how they relate to the environmental values being significantly impacted</li> <li>• Objectives and completion criteria – an outline of objectives and intended outcomes, and details of completion criteria for each offset project</li> <li>• Plans and policies – an outline of how the offset aligns with relevant plans and policies and how these projects align with them (e.g. species recovery plans)</li> <li>• Timelines, milestones – schedule of offset project implementation including an outline of key activities, stages of implementation, and milestones towards completion</li> <li>• Governance arrangement –outline stakeholder responsibilities for implementing the offsets projects, including contractual arrangements for third parties involved and legal obligations</li> <li>• Financial arrangements – details of offset project budget and recipients of funds if projects are being undertaken by third parties</li> <li>• Risk management – an outline of potential risks involved for offset projects and contingency measures</li> <li>• Monitoring – identify monitoring activities to assess progress with offset implementation and for compliance purposes</li> <li>• Reporting – schedules and means for reporting details of offset implementation.</li> </ul> | <ul style="list-style-type: none"> <li>• Appendix L is an offset proposal, and is based on the current knowledge Talison has of three properties, which are being considered as direct offsets. Talison is yet to complete detailed survey of the offset properties to confirm their suitability to offset the significant residual impacts of the Proposal. When Talison has completed studies, confirmed arrangements with DBCA for managing the land, and acquired the properties, a Talison Expansion Project Offsets Management Strategy will be prepared. It is envisaged that DBCA will have a high level of input to the Strategy given that they will manage the properties.</li> </ul> |

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| <p><b>WA Offsets Template</b></p>  | <p>The WA Offsets Template is a tool to summarise the information provided in the Offsets Section of the document. It should be included in Chapter 9 rather than at the end of Appendix L.</p> <ul style="list-style-type: none"> <li>• The existing environment/impact column should include all impacts identified using the residual impact significance model (Table 33, see previous comments regarding changes to this table). The impact/s to each species should be listed separately.</li> <li>• The “Offsets calculation methodology” section does not include all proposed offsets listed in Section 9.3.</li> <li>• For each proposed offset, address the Risk, Likely Offset success, Time lag and Offset quantification.</li> </ul>   | <ul style="list-style-type: none"> <li>• The WA Offsets template has been moved to section 9.6, Table 38 and has been updated to address these comments for all significant residual impacts.</li> </ul>  |
| <p><b>Land acquisition offsets (Section 9.3 - Items 1 &amp; 2 and Appendix L - Section 3.1 to 3.3)</b></p> | <p>Management under the Forest Management Plan is unlikely to be sufficient and a more detailed proposal outlining management actions for each proposed property will be required to realise the 20-year benefit suggested in the offset calculators. Please also note DBCA’s advice on this matter: <i>“DBCA intends to manage the offset land parcels consistent with the CALM Act which includes management for the purposes of conservation (e.g. threatened fauna habitat).”</i></p> <p>In addition to the above, please include a clear rationale for including Site W, which is in the Wheatbelt, approximately 350 km from the impact site. The EPA will need to be satisfied that the site contains suitable habitat and values related to the impacts of the proposal. Please refer to DBCA advice on this matter.</p> | <ul style="list-style-type: none"> <li>• Text in the document and Offset Proposal have been amended to management of direct offset properties by the DBCA consistent with the CALM Act.</li> <li>• Management plans for each Offset Property acquired will be developed in consultation with DBCA when the properties have been surveyed and acquired.</li> <li>• Site W has now been excluded from the Offset Proposal.</li> </ul> |

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| <p><b>Greenbushes habitat enhancement program (Item 3 in Section 9.3 and Section 3.4.2 in Appendix L)</b></p> | <p>Further information on the Greenbushes habitat enhancement program is required to determine whether it is suitable to be considered as an offset. It is unclear from the information presented whether this project would be considered an on-ground offset or a corporate social responsibility initiative. Please refer to information on page 20 of the WA Environmental Offsets Guidelines regarding this matter.</p> <p>If this activity is to be considered an offset, further information will be required including the objectives of the program, specific activities to enhance and retain habitat values, extent of habitat area, the expected outcomes, risks and likely offset success and offset quantification. This includes the list above from land acquisition offsets.</p> <p>It is also noted that this proposed offset was not included in the WA Offsets template and the Commonwealth Offsets Calculator was not completed for this project.</p> | <ul style="list-style-type: none"> <li>The BBG partnership program is outlined in the Offset Proposal but is not discussed in full detail. Full details of the program will be included in the Talison Expansion Project Offsets Management Strategy which will be developed and submitted to DotEE and DWER-EPA services. Talison does not have sufficient detail available to complete this document at this stage but will continue working toward this.</li> </ul> |

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| <p><b>Research offsets (Section 9.3 and Section 3.4.1 in appendix L)</b></p> | <p>Noting the proponent proposes to provide \$0.5m in funding towards Black cockatoo research, further information would be required to identify the specific research project/s proposed and research questions to be addressed, the value and relationship of the research to the significant residual impacts of the proposal and an assessment of how the figure of \$0.5m was determined.</p> <p>The WA Environmental Offset Guidelines (2014) contains guidance on when research offsets can be applied (p13). This includes:</p> <ul style="list-style-type: none"> <li>• Research projects should be focused on achieving an outcome, rather than expending a certain amount of money</li> <li>• Research must be designed to result in positive conservation outcomes</li> <li>• Research projects are generally only appropriate as offsets where there is a high degree of uncertainty regarding impacts of a project and new science is required to develop better mitigation measures or predictive tools to avoid and minimise the particular type of impact</li> <li>• Research offsets should only be used in certain circumstances, such as to add value to the outcomes of on-ground management and the understanding of the environmental value being impacted.</li> </ul> <p>Noting the advice from DBCA, that; “The provision of funding to implement recovery actions is likely to provide significant benefit to the species’ and may include actions other than research”, it is recommended that further discussions are held to determine the intent of this proposed offset and identify suitable project/s that meet the requirements of the offsets policy and guidelines.</p> | <ul style="list-style-type: none"> <li>• The specific details of the research program will be included in the Talison Expansion Project Offsets Management Strategy which will be developed and submitted to DotEE and DWER-EPA services. Talison does not have sufficient detail available to complete this document at this stage but will continue working toward this.</li> </ul> |

| EPA Factor               | DWER Comments   | Talisson Response  |
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| <p><b>Appendix L</b></p> | <p>The Offsets proposal at Appendix L relates only to matters under the EPBC Act. Appendix L does not provide the required information to be considered an offset proposal. The document should be updated to address the WA Offsets Policy and Guidelines and include specific management measures as discussed above. In addition, the following specific items should be addressed:</p> <ul style="list-style-type: none"> <li>• Add section on the WA Environmental Offsets Policy and Guidelines considerations after section 1.1. Ensure both documents are also referenced in Section 4.</li> <li>• Section 2.2.1 – In addition to comments from the DoEE, note that not all three species of Black Cockatoo have the same habitat requirements and therefore their habitat score and quantum of impact may be different.</li> <li>• Section 3.2.1 Program objectives – these should relate to the specific actions for the species being impacted rather than DBCA’s land acquisition program objectives.</li> <li>• Section 3.2.2 - No delivery timeframe is specified.</li> <li>• Reporting and Approvals – DWER will also need to be identified regarding reporting and approvals throughout the document (including Sections 3.1 and 3.2.3).</li> <li>• Section 3.4.1 &amp; 3.4.2 – See previous comments regarding further information required.</li> <li>• Additional Commonwealth Offsets Calculator for Trees with suitable hollows for Black cockatoo species.</li> <li>• Include site assessments for all proposed offset sites.</li> <li>• Remove the following attachments from Appendix L as they relate to an offset for a previous approval and will not be considered for these impacts – Offset management agreement; Site conservation agreement; 2018 Offset management annual report</li> <li>• The WA offsets template should be moved from the end of Appendix L to Chapter 9.</li> </ul> | <p>Appendix L is an offset proposal, and is based on the current knowledge Talison has of three properties, which are being considered as direct offsets. Talison is yet to complete detailed survey of the offset properties to confirm their suitability to offset the significant residual impacts of the Proposal. When Talison has completed studies, confirmed arrangements with DBCA for managing the land, and acquired the properties, the company will develop a Talison Expansion Project Offsets Management Strategy for submission to DotEE and DWER EPA Services.</p> <p>Appendix L has been revised and the comments were taken into consideration in revising the document. As per previous comment Offset calculators have not been developed for the hollows as the number of hollows on each offset property is not known at this point in time but hollow surveys will be conducted to assess this and calculators will be included in the Talison Expansion Project Offsets Management Strategy</p> |



