

Appendix A:

Comment Number	Section	Reviewer Comment
1	11.3 Assessment Process	<p>A draft version of the Matters of National Environmental Significance Chapter of the <i>Coordinator-General's Evaluation Report on the environmental impact statement</i> (May 2012) (CG's Report) was provided for review on 2 May 2012. Comments were provided by the Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC) to the Coordinator-General on 17 May 2012, which highlighted a number of inadequacies and omissions relating to the review of the potential impacts of the proposed Alpha Coal Development.</p> <p>Aspects of the comments provided on 17 May 2012 may be iterated in these comments. Where comments were addressed in the CG's Report it has been noted with '<i>acknowledged</i>'. The adequate assessment of the potential impacts of the Alpha Coal Project must address the inadequacies and omissions to a level that satisfies the requirements of the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act).</p>
2	11.4 Occurrence of MNES	<p>This comment, in part has been raised previously. The CG's Report, through the definition provided in the Alpha Coal Project EPBC Act Report dated April 2012 (the EPBC Act Report) provided by the proponent, has delineated potentially occurring species as those where:</p> <p>"suitable habitat for a species or ecological community occurs on the site, but there is insufficient information to categorise the species or ecological community as likely or unlikely to occur."</p> <p>The following EPBC Act listed threatened species were noted as potentially occurring on either the mine site or rail alignment: <i>Croton magneticus</i>; <i>Digitaria porrecta</i> (Finger Panic Grass); <i>Ozothamnus eriocephalus</i>; <i>Taeniophyllum muelleri</i> (Minute Orchid); <i>Erythrorchis radiatus</i> (Red Goshawk); <i>Dasyurus hallucatus</i> (Northern Quoll); <i>Nyctophilus timoriensis</i> (Greater Long-eared Bat); <i>Delma Labialis</i> (Striped Delma); <i>Furina dunmalli</i> (Dunmall's Snake); <i>Lerista allanae</i> (Allan's Lerista) and <i>Geophaps scripta scripta</i> (Squatter Pigeon). The assessment of these species was not sufficient to understand the extent to which they may or may not be impacted upon by the proposed activity.</p> <p>In discussions held between the department and the proponent, the department requested that they provide an adequate explanation for the exclusion of a species from assessment. The EPBC Act Report and subsequent analysis in the CG's Report for these species is insufficient for a meaningful assessment. For example <i>Croton magneticus</i>, <i>Ozothamnus eriocephalus</i> and <i>Taeniophyllum muelleri</i> (Minute Orchid) are all noted as having suitable habitat located either in the rail terminus (the Caley Valley Wetland) or in the northern areas of the rail alignment. <i>Nyctophilus timoriensis</i> (Greater Long-eared Bat) is discussed as having "potential habitat [which] may occur within the central section of the rail alignment". The department has previously informed both the</p>

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		<p>proponent and the Queensland assessment officers [get date] that surveys conducted for both the rail and mine component of the project were inadequate. In the case of the Greater Long-eared Bat, roughly 2/3's of the central section of the rail alignment in marked as not being surveyed at all.</p> <p>Without suitable surveys (in areas of acknowledged potential habitat), the decision to exclude species potentially occurring in the project site while lacking appropriate justification is not considered reasonable.</p> <p>Table 11.11: Migratory marine species notes a number of species as being absent from the project area. These species include <i>Balaenoptera edeni</i> (Bryde's Whale); <i>Balaenoptera musculus</i> (Blue Whale); <i>Caretta caretta</i> (Loggerhead Turtle); <i>Chelonia mydas</i> (Green Turtle); <i>Dermochelys coriacea</i> (Leatherback Turtle); <i>Dugong dugong</i> (Dugong); <i>Eretmochelys imbricate</i> (Hawksbill Turtle); <i>Lamna nasus</i> (Porbeagle); <i>Natator depressus</i> (Flatback Turtle); <i>Orcaella brevirostris</i> (Irrawaddy dolphin); <i>Orcinus orca</i> (Orca); <i>Rhinocodon typus</i> (Whale Shark) and <i>Sousa chinensis</i> (Indo-Pacific Humpback Dolphin).</p> <p>The table also lists <i>Lepidochelys olivacea</i> (Olive Turtle) and <i>Megoptera novaeangliae</i> (Humpback Whale) as 'unlikely' to occur.</p> <p>As mentioned, this section identifies several species as being absent from the proposed impact area. When the opposite is true, for example <i>Chelonia mydas</i> (Green Turtle) and <i>Dugong dugon</i> (Dugong) are located in close vicinity to the project site, yet labelled as "not occurring". The department considers that there is potential for indirect impacts to these species, through the construction and operation of the proposed rail loop located in the Caley Valley Wetlands (CVW) and this risk will need to be addressed.</p> <p>According to the assessment criteria provided in the EPBC Act Report these species listed as 'unlikely' or 'not occurring' underwent no further assessment for potential impacts.</p> <p>However the EPBC Act Report (Page 294) (Eco Logical 2012) confirms the presence of a number of these species including: Dugong; Flatback Turtle; Green Turtle; Humpback Whales; Indo-Pacific Humpback Dolphin and Snubfin Dolphin (<i>Orcaella heinsoni</i>; not acknowledged in Table 11.11) as being present at Abbott Point, near the terminus of the rail alignment.</p> <p>The CG's Report needs to provide an adequate assessment of potential impacts to all EPBC listed threatened species and migratory species. Further comments regarding the potential impacts to these species are discussed at comments 18, 19, 20 and 22.</p>
3	Section 11.5 Potential	The identification and subsequent discussion of potential impacts is focused largely on impacts related to the development of the mine and associated infrastructure, with little or no discussion about these aspects in

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	Impacts	<p>relation to the rail alignment.</p> <p>For example, the CG's Report identifies fragmentation resulting from the mine pit and removal of riparian vegetation during creek diversions (which are contained to the mine site). There is only a cursory discussion of the fragmentation impacts associated with the construction and operation of the rail line. The EPBC Act Report (Eco Logical 2012) repeatedly states, such as on page 176, that due to the linear nature of the rail alignment the impact of fragmentation would be minimal. The department understands that contemporary ecological research has indicated that species dependent on specialised habitats; such as the micro-habitat dependent species identified as 'likely' to occur along the rail line can be disproportionately impacted by fragmentation resulting from linear infrastructure. The potential for impacts resulting from this linear infrastructure are considered likely to be compounded by the already highly fragmented nature of the Brigalow Belt North Bioregion through prior development.</p> <p>Additionally there is no discussion of potential downstream impacts associated with the clearing of riparian vegetation during water course crossings or the levels of indirect habitat loss through the sterilization of areas surrounding the project area by due to the construction and operation of the project activities.</p> <p>The last point in this section notes the potential for a long term gain for some species, such as the Squatter Pigeon, through rehabilitation activities. It is not clear why this is a positive. The mine will result in a clearing of habitat in an area for 30 years, whereas rehabilitation will not occur until towards the end of the mine life – as a consequence, for the duration of operations there will be no available habitat. SEWPaC considers that final dot point, regarding the potential benefits of mine rehabilitation on certain species, is unjustified in consideration due to the temporal separation and uncertain nature of rehabilitation activities</p>
4	Section 11.6 Potential Impacts	<p>The CG's report appears to misrepresent the level of assessment that was conducted on species nominated as "potentially occurring" within the Alpha Development Area. Page 207 states that:</p> <p>"The EPBC Act report (Eco Logical 2012) presented a detailed assessment of those species or ecological communities determined to have a 'known', 'likely' or 'potentially occurring' likelihood of occurrence. The assessment was informed through field surveys, high resolution aerial photography interpretation and potential habitat modelling for threatened species..."</p> <p>The EPBC Act Report states that habitat modelling was used only for species of a known or likely rating. The EPBC Act Report also only states high resolution aerial photography interpretation was used for the creation of the predictive habitat model. The department considers this indicates that the assessment of 'potentially occurring' species was actually limited to desk top analysis and the surveys conducted (which have previously been established as insufficient for EPBC purposes). The statement in the CG's Report over-states the level of</p>

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		<p>assessment that was applied to 'potentially occurring' species.</p> <p>The department notes that that CG's Report states that "SEWPaC has advised them that the survey effort applied to the project, given its scale, do not meet the department's survey guidelines. Therefore modelling and compensation (offsets) must adopt an appropriate response to the resulting risk". However, the Qld government's acceptance of the proponent's assessment raises concerns regarding the level to which condition-setting manages the risks to these matters (of NES) such that the impacts would be considered 'acceptable' by the department and the Minister. Additional discussion of these matters occurs at comments 4, 5 6, 7 and 9.</p>
5	Section 11.6.1 Threatened Species Potential Habitat Modelling	<p>The predictive habitat model was adapted as a method to address inadequacies in the survey effort applied to the project area. It is noted in the EPBC Act Report (Eco Logical 2012) that in order to understand and manage the risks associated with using an unverified predictive model, the model must be conservative and the data produced judged accordingly.</p> <p>The department is concerned that extrapolation of habitat quality from aerial photographs may prove to be unreliable and non-conservative, particularly in relation to the importance of understorey composition to species such as Squatter Pigeon, <i>Denisonia maculata</i> (Ornamental Snake), <i>Egernia rugosa</i> (Yakka Skink), Brigalow Scaly-foot and <i>Poephila cincta cincta</i> (Black-throated Finch). The proponent has acknowledged in their EPBC Act Report (Eco logical 2012) that the modelling methodology has limitations and has yet to be field verified.</p>
6	Section 11.6.1 Threatened Species Potential Habitat Modelling	<p>The formulation of the modelling methodology and criteria was heavily influenced by the provision of "expert opinions". The department has repeatedly requested the proponent to provide additional details of the level of input provided by these experts and statements addressing the confidence they placed in the model produced to meet the stated aims of the predictive habitat model. In the description of the refinement provided by the experts into the formulation of the modelling there is no indication how much of the input was based upon on-ground knowledge and how much of the input was more high level, desktop examination of areas. It is also now understood that some of the experts are also fulltime employees of the consultants undertaking the modelling. This raises questions regarding the independent review of the model's effectiveness.</p>
7	Section 11.6.1 Threatened Species Potential Habitat	<p>The discussion of species suitable for potential habitat modelling was not undertaken for <i>Geophaps scripta scripta</i> (Squatter Pigeon (Southern Sub-Species)) and species 'potentially occurring'.</p> <p>In the case of the Squatter Pigeon exclusion was based upon a lack of correlation between species habitat preferences, which are poorly known, and data sources used in the modelling. The specific case of the Squatter Pigeon will be discussed further in comment 14.</p>

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	Modelling	The rationale behind the exclusion of 'potentially occurring' from the modelling methodology was that the known habitat requirements/ potential use of these species could not realistically be represented by the model. In the first instance no discussion is provided in either the EPBC Act Report (Eco Logical 2012) or the CG's Report what criteria were used to judge a "realistic representation".
8	Section 11.6.2: Connectivity Analysis	<p>This report requires that an adequate analysis of the likely impacts associated with the reduction in connectivity is provided. The CG's report provides no conclusion or assessment relating to the loss of connectivity with regard to matters of national environmental significance (MNES). The discussion of maintaining connectivity is limited to the information provided in the EPBC report provided by Hancock. The EPBC Act Report does identify 3 potential corridors (page 45) denoted as corridors A, B and C:</p> <p>The three nominated corridors are located off mining leases currently held by HCPL and located on a lease held by Waratah Coal Pty Ltd. There is insufficient information available on the ability to secure and appropriately protect in perpetuity these sites. The department is concerned that the 3 nominated corridors are unlikely to be effectively secured. As the only mitigation measure provided to address this potential impact additional consideration and sureties surrounding this point are required.</p>
9	Section 11.6.3 Limitations	<p>In the CG's Report discussion of the limitations of the predictive habitat model and subsequent discussion of potentially impacted species, there is no acknowledgement, as stated in the EPBC Act Report, that the predictive habitat model "is not able to locate the actual presence of certain microhabitat features, such as leaf litter and fallen debris. Nor does it acknowledge the limitations of the data to convey on-ground condition of habitats, such as erosion, livestock damage or weed infestation." As many of the EPBC Act listed threatened species likely to be impacted by this development are dependent on the presence and condition of these microhabitats, the absence of a discussion considering this limitation is of concern to DSEWPaC. Especially as the modelling methodology underpins all of the assessments that have been made regarding potential for impacts and the offsetting of unavoidable impacts.</p> <p>The CG's report states that there is "some level of on-ground detail yet to be obtained" The department would argue that with the inadequate nature of the field surveys and the noted lack of certainty in the species records used in the construction of the model by the EPBC Act Report (Eco Logical 2012), considerable on-ground detail would be required. A representative view of the value and amount of ground-truthing required to verify the model should be acknowledged in this respect. Until such a point, the prediction of potential habitat for understory dependant species is likely to overestimate the amount of potential habitat available regionally. By overestimating the amount of regionally available habitat the impact of clearing on the project site is underestimated. This view is consistent with the EPBC Act Report (Eco Logical 2012), which states the model</p>

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		<p>is conservative because it is likely to over-estimate amount of habitat likely to present on the project site by making the assumption “that the microhabitat features associated with these broad habitats will be present”.</p> <p>The assessment for each listed species that was subject to predictive habitat modelling references the likely impact in terms of the regional loss of habitat. There is no discussion regarding the likelihood that impacts may be underplayed by the interpretation of the data. SEWPaC does not consider this to be an appropriate consideration in the assessment of these species with regard to the high levels of residual risk associated with the use of an unverified habitat model. This concern applies to every species that was assessed using the predictive habitat model.</p> <p>The CG’s Report does acknowledge the department’s concerns regarding this issue, but have provided no additional assessment of the project to address the high levels of residual risk associated with the project. The conclusions drawn by the CG’s Report are that this level of detail will be provided in the post approval. As so much of the information provided and assessed in this project is based upon the use of an <i>unverified and untested</i> habitat model this creates an exceptionally high level of risk associated with judging acceptability of risks. This level of risk is not addressed in the discussion and assessment of impacts provided in the CG’s Report.</p> <p>Consistent with previous comments from the department, it should be noted that if additional surveys cannot be undertaken, modelling and compensation (offset) proposals must adopt an appropriate response to the resulting risks.</p>
10	Imprecise language (general comment)	<p>Many of the mitigation measures proposed by the proponent and endorsed in the CG’s Report are not clearly established as written. The language is vague and as a result meaningless.</p> <p>For example, on page 43, Section 3.2.4 paragraph 2 the EPBC Report states that fragmentation during the construction of the rail alignment will be mitigated by the re-establishment to the “highest realistic extent” following construction with no discussion regarding what entails “highest realistic extent”.</p> <p>For example, on page 295, section 7.2.3 Table 59 the EPBC Report states “During normal operations, loaded coal wagons shall not travel over the rail loop extending over the wetland”. There is no further discussion about what would constitute normal operations or what circumstances would result in normal operations not being abided by.</p> <p>For example, on page 223, section 11.8.1, of the CG’s Report, states that fragmentation due to the rail alignment is acknowledged as a major issue for relevant species with the proponent “committing to reducing the width of rail corridors if practicable”. There is no further discussion of what would constitute a practicable</p>

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		<p>situation.</p> <p>The mitigation measures proposed by the proponent and endorsed by the CG's Assessment Report continue to be unclear in their establishment. Please see the original examples provided in the comments and reflected in the CG's Assessment report's discussion of mitigation measures.</p>
11	<p>Section 11.6.7 Threatened flora Black Ironbox <i>Eucalyptus raveretiana</i> 'vulnerable'</p>	<p>The CG's Report states that <i>Eucalyptus raveretiana</i> was recorded during field surveys, but a discussion of the records, especially with reference to the population size and structure of these observations is still missing.</p> <p>The mitigation measures continue to state that micro-alignment wherever possible. However, there is no discussion in the CG's report regarding what level of micro-alignment of the rail line is feasible. The department is still concerned about the effectiveness for micro-alignment to be considered a mitigation measure without further discussion of the population structure of the observed <i>Eucalyptus raveretiana</i>.</p>
12	<p>Section 11.6.7 Threatened flora King Blue Grass <i>Dichanthium queenslandicum</i> 'vulnerable'</p>	<p>The department still has concerns regarding <i>Dichanthium queenslandicum</i>, which is prefaced in the EPBC Report (Eco Logical 2012) by saying that "King Blue Grass is poorly studied and little is known about its habitat requirements". However, it was considered to be appropriate for potential habitat modelling "as the species is closely associated with types of habitat able to be captured through the modelling data". It is not understood how this claim can be supported in light of the proponent's opening statement.</p> <p>In the EPBC Act Report (Eco Logical 2012), this species was stated as "known to occur as a component of <i>Natural Grasslands of the Queensland Central and the northern Fitzroy Basin...</i>" No other information related to habitat preferences was provided. However there is a clear disjunct between the probable habitat predicted between <i>Dichanthium queenslandicum</i> and the Natural Grasslands threatened ecological community. Given this disjunct consideration of the accuracy of habitat modelling for <i>Dichanthium queenslandicum</i> bears additional consideration. This disjunct is best demonstrated by comparing levels of potential habitat for <i>Dichanthium queenslandicum</i> (page 99-101; Figures 23, 24 and 25) and the Natural Grasslands listed ecological community (page 252-254; Figure 70, 71 and 72).</p> <p>Despite the conclusions reached by the EBPC Act report (Eco Logical 2012) regarding the importance of the occurrence in this area, the department has concerns regarding the impact of this activity coupled with other activities in the region, which will potentially result in a significant reduction in the extent of this species. Their assessment does not reflect the long-term cumulative impact on this species despite the department's request that they do so.</p> <p>In this instance, it appears that the proponent has used a surrogate to quantify the potential habitat of an EPBC</p>

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		listed species, in the absence of meaningful data beyond a general Regional Ecosystem layer. The use of the BPA for the region is stated as only to judge patch size.
13	Section 11.8.1 Identified fauna species Black-throated Finch <i>Poephila cincta cincta</i> 'endangered'	<p>The CG's Report of the potential impacts to the Black-throated Finch reiterates a point made in the EPBC Act Report (Eco Logical, 2012) regarding the impact analysis. This point (Page 220 CG's Report) states that:</p> <p>"The risk to the species from the loss of an important area is most pertinent at the mine site, where large scale clearing will occur. However, given the survey effort across two years at the mine site within areas of suitable habitat, the EPBC Act report (Eco Logical, 2012) considers there to be a low risk that the mine site is an important area for the species."</p> <p>This statement seems to be a mis-interpretation of the information provided in the EPBC Act Report (Eco Logical 2012) (page 151), which states:</p> <p>"However, it is considered that the level of survey effort across the mine site provides a good indication that the area is unlikely to support a core or important population of the subspecies..."</p> <p>DSEWPaC notes that "important populations" as defined in <i>Matters of National Environmental Significance Significant Impact Guidelines 1.1</i>, (the guidelines) is a delineation applied to potential impacts on species listed as "Vulnerable" under the EPBC Act. For "Endangered" or "Critically Endangered" species or ecological communities, all populations are considered to be important and "habitat critical to the survival of a species" is the more appropriate factor. Definitions of these and related terms must be provided if they depart from usual usage under the EPBC Act.</p> <p>Furthermore, the discussion of this species seeks to confirm absence on the basis of a survey effort, which incidentally is considered by the department to be inadequate given the scale of the project area. If present, any population of Black-throated Finch would be considered important. While further discussion does relate to potential impacts to habitat for this species, it should be noted that if the species is found or believed to be present, the estimated 7,154 hectares of largely contiguous habitat on the proposed mine site would almost certainly be considered "habitat critical to the survival of a species".</p>
14	Section 11.8.1 Identified fauna species Squatter Pigeon <i>Geophaps scripta scripta</i>	DSEWPaC is of the view that the potential impacts of the construction and operation of the mine infrastructure and rail alignment are likely to have a significant impact on this listed species. While it is noted that the range of this species is large, many populations, such as those in south east Queensland, have continued to shrink and eventually disappear from the landscape. As the population in the Galilee Basin region is currently considered to be stable, it is likely to be important for this species. The project site is located on the western extent of high potential habitat for this species.

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	(southern subspecies) 'vulnerable'	<p>Currently there is very limited, reliable ecological knowledge regarding the levels of habitat usage, long-term persistence in modified landscapes, dietary requirements, local and regional movement patterns and habitat requirements for sustaining breeding populations for this species.</p> <p>The department is also of the view that the cumulative impacts of the development of the Galilee coal basin will result in significant impacts to this species.</p> <p>The CG's Report has selectively represented the DSEWPaC's view that the Squatter Pigeon is likely to be impacted by the proposed development of the Alpha mine and rail. The CG's has limited their recognition of this concern to cumulative impacts resulting from future development of the Galilee Basin.</p> <p>DSEWPaC has continued to express the view that the 440,000 kilometre ^[2] is not representative of the actual habitat availability for this species. It has been noted that there has been substantial reduction of habitat extent and population numbers with areas in Queensland's central west being the most likely area to have stable and sufficiently large populations for this species. This conclusion has been reached through the discussion of the current range of the Squatter Pigeon facilitated by DSEWPaC with a range of expert input, including that of Queensland State Officials.</p>
15	<p>Section 11.8 General Comment Yakka Skink <i>Egernia rugosa</i> 'vulnerable'</p>	<p>The discussion of the impact analysis for the Yakka Skink seems to discount the potential impacts of the loss of 8,152 hectares of mapped high potential habitat, only acknowledging the loss of 812 hectares of high potential habitat along the rail corridor, stating there is "a low probability that the mine site supports Yakka Skink". DSEWPaC considers that this statement lacks suitable justification. The only justification provided is the lack of identification during the surveys conducted, which have already been discussed as inadequate. The EPBC Act Report (Eco Logical 2012) states on page 199 that "there are known records within the project area..." with no delineation of where these records are compared to either the mine or rail site. DSEWPaC would also note the Desert Uplands Bioregion has historically been subject to low levels of systematic survey effort, indicating that many species with potential habitat in the region are likely to be under recorded.</p> <p>DSEWPaC does acknowledge that the loss of the full 8,964 hectares of high potential habitat is considered in the Draft Biodiversity Offset's Package ((Eco Logical 2012) provided by the proponent. Regardless DSEWPaC considers it necessary for the discussion of impacts to include an adequate assessment of the likely impact of the loss of the full 8,964 hectares.</p>
16	<p>Section 11.8: Threatened Species</p>	<p>DSEWPaC has made comments against a number of species identified as likely to be impacted. The previous comments provided a number of over-arching concerns regarding the assessment processes, such as the extrapolation of the modelling data to a regional scale. These general concerns are considered by DSEWPaC to apply to all species, where appropriate. In general, DSEWPaC considers that the conclusions reached are</p>

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	General Comment	offered without sufficient reference to the risk and uncertainty posed by the modelling approach adopted by the proponent and the assumptions it entails.
17	Cumulative impacts (general comment)	<p>DSEWPaC notes that the CG's Report limits the consideration of cumulative impacts to the Great Barrier Reef and the environs of Abbot Point, disregarding the potential for cumulative impacts to terrestrial ecology in the Galilee Basin and rail corridor. The next decade will see development of a number of coalmines in the Galilee Basin, resulting in the loss of very large areas of native vegetation and potential cumulative impacts on groundwater resources. Apart from the direct loss of vegetation, the north-south orientation of the mines and east-west orientation of several rail lines will inevitably compromise ecological connectivity. These cumulative impacts appear not to have been rigorously addressed.</p> <p>Corresponding to likely cumulative impacts, proponents are encouraged to cooperate in securing offsets with cumulative benefits.</p> <p>The department still considers the potential for cumulative impacts to occur as the result of the potential development of several open and underground coal mines, and associated rail infrastructure of similar size to the proposed Alpha Coal Project.</p> <p>Currently the discussion of cumulative impacts in the CG's Report does not provide a discussion of the potential for terrestrial cumulative impacts and instead focuses on the Cumulative Impact Assessment (CIA) being prepared for the Abbott Point Port Expansion. It should be noted that while the EPBC Act Report (Eco Logical 2012) frequently refers to the cumulative impact assessment, which considers impacts to the Caley Valley Wetlands, no substantial input has been provided from this study.</p>
18	Section 11.10 Migratory Species	<p>This section still does not address the importance of the Caley Valley Wetlands in a meaningful way. The CG's report has reflected the department's comment that the Caley Valley Wetland forms part of the East-Asian Australasian Flyway, which is one of eight major flyways in the world, albeit not in the subsequent discussion of the importance of the wetlands to migratory species.</p> <p>As already mentioned, the CG's Report fails to consider the presence of a number of migratory species, in particular the EPBC Act listed marine turtles and dugong's located in the vicinity of the project. These species are considered likely to be impacted through changes in light levels, noise, dust and water chemistry.</p> <p>DSEWPaC has requested assessment of these species on numerous occasions, in commenting on the EIS, the SEIS and the SEISA.</p>
19	Section 11.10.2 Migratory	DSEWPaC has concerns related the inconsistent consideration of the Caley Valley Wetlands (CVW) as Important Habitat for migratory species.

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	Species	<p>Page 281 of the EPBC Report (Eco Logical 2012) states that “the survey effort used within the studies does not address the Commonwealth survey requirements for shorebirds”. As adequate surveys and habitat modelling/assessment were not conducted, it was assumed that “the project site may provide important habitat for a number of shorebirds” and “the areas impacted have the potential to provide roosting and/or foraging habitat for shorebirds”.</p> <p>This statement later appears to be contradicted. Page 287 of the EPBC Report (Eco Logical 2012) states that “the Project does not represent important habitat or support an ecologically significant proportion for any of the migratory species listed above....” The department is of the view that while this statement may be valid for some of the species listed above, such as <i>Apus pacificus</i>, without further survey to determine whether an ecologically significant proportion it must be considered important habitat for some of the species listed, such as <i>Rostratula australis</i> and <i>Haliaeetus leucogaster</i>, and the impacts assessed accordingly.</p> <p>The discussion of the importance of the Caley Valley Wetlands is missing from the CG’s Report. This is coupled with seemingly contradictory or unsubstantiated statements provided by the proponent in their EPBC Act Report (Eco Logical 2012) and reiterated in the CG’s Assessment Report. Please refer to the provided example, which has been re-iterated and approved in the CG’s Report. The assessment has failed to provide any basis or justification for the decision that the Caley Valley Wetlands would not constitute important habitat for a number of the species listed. This point also seems to be contradicted on page 141 of the CG’s Report, which states “[t]he Caley Valley Wetland is a wetland of high ecological significance in the Great Barrier Reef Catchment”</p> <p>Addressing this issue would also require re-consideration of species, such as <i>Rostratula australis</i>, which is listed under the EPBC Act as both threatened and migratory.</p>
20	Section 11.10.2 Indirect Impacts and mitigation	<p>DSEWPaC has concerns regarding the lack of consideration of the Abbot Point Cumulative Impact Assessment (CIA) to the discussion of the CVW:</p> <p>During discussions held with the department on 30 March 2012, HCPL and its representatives stated that while the CIA being undertaken to assess impacts to the Abbot Point region would not be completed in time for the assessment of this project, preliminary findings from this process would be available for inclusion in the discussion of potential impacts, including cumulative impacts to the CVW.</p> <p>The CG’s Report states on page 233 that the CIA has already identified additional shorebirds, which have since be included in the discussion. This would indicate that the CIA will play a vital role in the establishment and understanding of the impacts which will occur on the CVW.</p> <p>The department is of the view that the proposed level of development in the vicinity of the CVW is likely to have</p>

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		<p>cumulative direct and indirect impacts on migratory species. The department therefore remains interested in the findings (or preliminary findings) of the cumulative impact assessment.</p> <p>Associated risk of approval:</p> <p>The MNES report states that a number of the management, mitigation and offsetting principles will be guided by the CIA and EMP currently being prepared. As these documents have yet to be finalised, the department will not comment on these measures at this time.</p>
21	Section 11.10.4 Conclusions:	<p>DSEWPaC considers that the impacts to migratory species have not been adequately assessed with reference to the CVW being considered important habitat for a number of these species.</p> <p>In the absence of the cumulative impact assessment, the preliminary view of the department is that the Caley Valley Wetland is important to migratory waterbirds and that it will be significantly impacted by coal mine-to-port operations, at least cumulatively. Offsets in relation to this proposal would therefore be appropriate. The department notes (without endorsement) that the proponent has foreshadowed a number of activities that could be taken as at least partial offsets.</p>
22	Section 11.11 Great Barrier Reef World Heritage Area	<p>Consideration of the heritage values of the Great Barrier Reef Marine Park:</p> <p>The department considers that the Abbot Point area does embody the local expression of several values of the Great Barrier Reef World Heritage Area, particularly in relation to biodiversity – examples are provided on page 239 of the CG’s Report, confirming the presence of rare or endangered species of plants and animals. The seagrass beds that are mentioned are a key ecological feature of the GBRWHA, support the Dugong and Green Turtles in particular. DSEWPaC’s views on the ecological values of the Caley Valley Wetland have already been expressed elsewhere in this document. The concern for the department is the lack of consideration for downstream effects to the values of the GBRMP with regard to the construction of the rail and operation of the mine on catchments that drain into the GBRMP system.</p> <p>However, the department does acknowledge that part of this impact would more properly be considered in relation to port expansion proposals.</p>
23	Section 11.13 Offsets	<p>DSEWPaC considers that the average offsetting ratio provided for species and communities protected under the EPBC Act ranges from 4:1 – 6:1 depending on whether the habitat is confirmed or high potential. The department does not consider that this level of offsetting is likely to adequately address the high level of risk associated with the residual/ unavoidable impacts of the Alpha Coal Project. The department therefore reserves the right to consider higher ratios or other compensatory measures.</p> <p>The discussion of offsets in the CG’s Report does acknowledge DSEWPaC’s view that the proposed offsetting</p>

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		<p>levels are likely to be insufficient to address the high level of risk associated with the development of the Alpha Coal Project.</p> <p>The department's comments were about statements provided by the proponent and repeated through the CG's Assessment report that the average offset level proposed for MNES are likely to be 4:1 – 6:1.</p> <p>While set ratios for offsets are generally not set, the ratio proposed by the proponent's Draft Biodiversity Offset Report (DBOS) (Eco Logical 2012) does not sufficiently address the uncertainty inherent in the predictive habitat model. This uncertainty is confirmed by the proponent's view that the proposed offsetting requirements are likely to be unrepresentative of the amount of potential habitat likely to be lost for each species.</p>
24	Section 11.13 Offsets	<p>DSEWPaC notes that the offsetting strategy provided in this chapter indicates that offsets of lower quality may be proposed to meet the offsetting liability during the construction of the project. For example, in the offset description for Black-throated Finch, areas of 'confirmed' Black-throated Finch habitat may be offset by securing areas of 'high potential' habitat at a ratio of 6:1. The department considers that direct offsets provided should be "like for like". Offsetting areas with lower quality habitat is unlikely to be considered acceptable, particularly for species with higher levels of risk (i.e. endangered).</p> <p>Additionally, neither the CG's Report or the DBOS (Eco Logical 2012) strategy provide a discussion regarding the potential offset liability for the indirect loss of habit for threatened species as a result of areas adjacent to the project area being "sterilised" with regard to habitat quality.</p>
25	Section 11.13 Offsets	<p>The discussion of offsets in the CG's Report and the DBOS (Eco Logical 2012) has not discussed the requirement to offsets residual impacts to Squatter Pigeon.</p> <p>As described, the department is of the view that there are likely to be significant impacts associated with this species as a result of the proposed project (or at least cumulatively). In this respect, the likely level of impact to this species will need to be considered and where avoidance, mitigation and management strategies cannot be applied, an appropriate offset strategy for this species developed.</p> <p>This point was previously been raised with the Queensland Government and has not been acknowledged or discussed in the CG's Report. As discussed above, the direct impacts to the Squatter Pigeon have not been discussed in the CG's Report. Correspondingly, there is no discussion in the CG's Report regarding the level of unavoidable impacts likely to occur and how these impacts will be offset.</p>
26	Section 11.13.7 Offsets Delivery of	<p>DSEWPaC notes that the DBOS (Eco Logical 2012) states on page 49 that "HCPL propose to review the impacts of each stage and associated offset commitments, at least 12 months before the commencement of action. At this time a revised biodiversity offset strategy, and associated offset package, will be provided for</p>

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	biodiversity offsets	<p>review to the relevant agencies.” The DBOS also states “It is proposed, at this stage, ecological equivalence assessments be completed at the impact sites only.”</p> <p>While the sequential delivery of biodiversity offsets is an option open for negotiation, the department has reservations about the continued re-assessment of the likely impacts and associated offsets after the commencement of the proposed project activities. Particularly, with the likelihood those values will degrade in proximity to mining operations.</p> <p>For example, in the northern section of the proposed open pit mine a significant area of high potential habitat for Black-throated Finch has been mapped utilizing the predictive habitat model described in the EPBC Act Report (Eco Logical 2012). This section of the mine is currently scheduled to be sequentially developed during Stages 1, 2 and 3. The department is of the view that the proposed project activities are likely to adversely impact adjacent areas, in this case lowering the quality of the habitat for Black-throated Finch. These revised offsets are not likely to be reflective of the overall impact of the development.</p> <p>It is acknowledged that the CG’s Report represents our concerns regarding this matter; however, they have provided no justification or further discussion of this issue about why it is appropriate to uphold the proponent’s wish to continue on this path.</p> <p>The CG’s Report recommends the staged delivery of offsets, which as noted in the original comment remains an option of consideration for DSEWPaC. However, the discussion of offsets delivery in the CG’s Report fails to address the proponent’s proposed sequential assessment of offset liability.</p> <p>For example, the Draft Biodiversity Offset Strategy states:</p> <p>The establishment of the ecological equivalence, through pre-clearance surveys, is proposed to establish the final offset liability for both State and Commonwealth matters there potential for the example provided in the comments to occur, not only for the Black-throated Finch, but for most matters of nationally environmental significance being impacted by this development.</p>
27	Section 11.13 General Comment	<p>As noted above DSEWPaC considers cumulative impacts to terrestrial ecology likely to occur. Corresponding to likely cumulative impacts, proponents are to be encouraged to cooperate in securing offsets with cumulative benefits.</p> <p>DSEWPaC has recently facilitated a workshop, which made significant progress in addressing this issue. This workshop was attended by Queensland Government representatives. Currently a draft report has been produced and provided for preliminary comment, including Queensland Government officers. DSEWPaC would</p>

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		<p>consider it appropriate for the principles established in this workshop to address and mitigate the cumulative to terrestrial ecology in the project area to be reflected in this report.</p> <p>DSEWPaC does acknowledge that the Queensland Government is committed to limiting cumulative impacts to terrestrial ecology through limiting the development of rail corridors from the Galilee Basin to coastal Queensland.</p>
28	Offsets (general comment)	<p>As noted elsewhere in this document, the department remains concerned at the level of uncertainty accepted by the proponent in their modelling approach to evaluating species occurrence. Particularly in this context, the department will not comment at this stage on any specific offset proposals, but is giving the matter active consideration. Further discussion with the proponent and likely state government is required, in particular in relation to ratios and legal mechanisms for securing offsets.</p> <p>DSEWPaC would note that at no point was the Commonwealth provided with Draft Conditions prior to the approval of the Alpha Project by the Queensland Government. As such DSEWPaC is unable to provide comment or endorsement of the conditions and recommendations attached to the Alpha Coal Project as suitably addressing the concerns highlight with reference to EPBC Act MNES.</p>
Comments Regarding Conditions attached to the CG's Report		
	Conditions General Comment	<p>DSEWPaC would note that at no point was the Commonwealth provided with Draft Conditions prior to the approval of the Alpha Project by the Queensland Government. As such DSEWPaC is unable to provide comment or endorsement of the conditions and recommendations attached to the Alpha Coal Project as suitably addressing the concerns highlight with reference to EPBC Act MNES.</p>