

4.14 BIODIVERSITY OFFSETS

4.14.1 Revised Biodiversity Offset Strategy

This section responds to submissions from stakeholders in relation to the Biodiversity Offset Strategy.

Submission reference: RA9, RA17, SIG2, SIG6, SIG9, SIG9, SIG10, P39 and P88

Summary response: The Biodiversity Offset Strategy for the Project has been revised since the EIS was exhibited. Having regard to State and Commonwealth offsetting methods, the biodiversity offsets proposed for the Project will adequately compensate these impacts of the Project on biodiversity values. The Biodiversity Offset Strategy will protect approximately 6,071 ha of woodland and open forest, revegetate 2,686 ha of woodland and rehabilitate 2,384 ha of woodland. The Biodiversity Offset Strategy also includes significant areas of known and potential habitat for the suite of species predicted to be impacted by the Project.

Since the exhibition of the EIS, Shenhua Watermark has enhanced the Biodiversity Offset Strategy for the Project to comprise the following:

- Onsite Biodiversity Offset Areas, comprising:
 - Conservation and ongoing management of existing vegetated land within the Mt Watermark Offset Area and Revised Offset Area 6;
 - Restoration of vegetation communities and associated habitat within the aforementioned onsite offset areas and the Mooki River Offset Area; and
 - Rehabilitation of mined areas (Mine Rehabilitation Offset Area).
- Offsite Biodiversity Offset Areas, comprising:
 - Conservation of existing vegetated areas within the Existing Offsite Biodiversity Offset Area and the Additional Offsite Biodiversity Offset Area; and
 - Restoration of vegetation communities and associated habitat within the aforementioned offsite offset areas.
- Indirect Offsets, such as funding for Landcare, targeted research or recovery planning.

A detailed assessment of the revised Biodiversity Offset Strategy is presented in **Appendix F**.

Additional Offsite Biodiversity Offset Area

As noted above, an Additional Offsite Biodiversity Offset Area has been included in the Biodiversity Offset Strategy for the Project (see **Figure 73**). The Additional Offsite Biodiversity Offset Area comprises of two properties: Mount Erin and Glendowda-Currajong, encompassing a total area of 4,095 ha located approximately 50 km west of the Project Boundary, near Tambar Springs, NSW.

To remove the potential for land use conflict, any land currently cultivated or historically cropped (as evidenced from the lack of native vegetation) within the Additional Offsite Biodiversity Offset Area has been annexed out of these offset properties. In this regard, 514 ha of existing agricultural land on the Additional Offsite Biodiversity Offset Area will be maintained for continued agricultural production.

Vegetation Communities

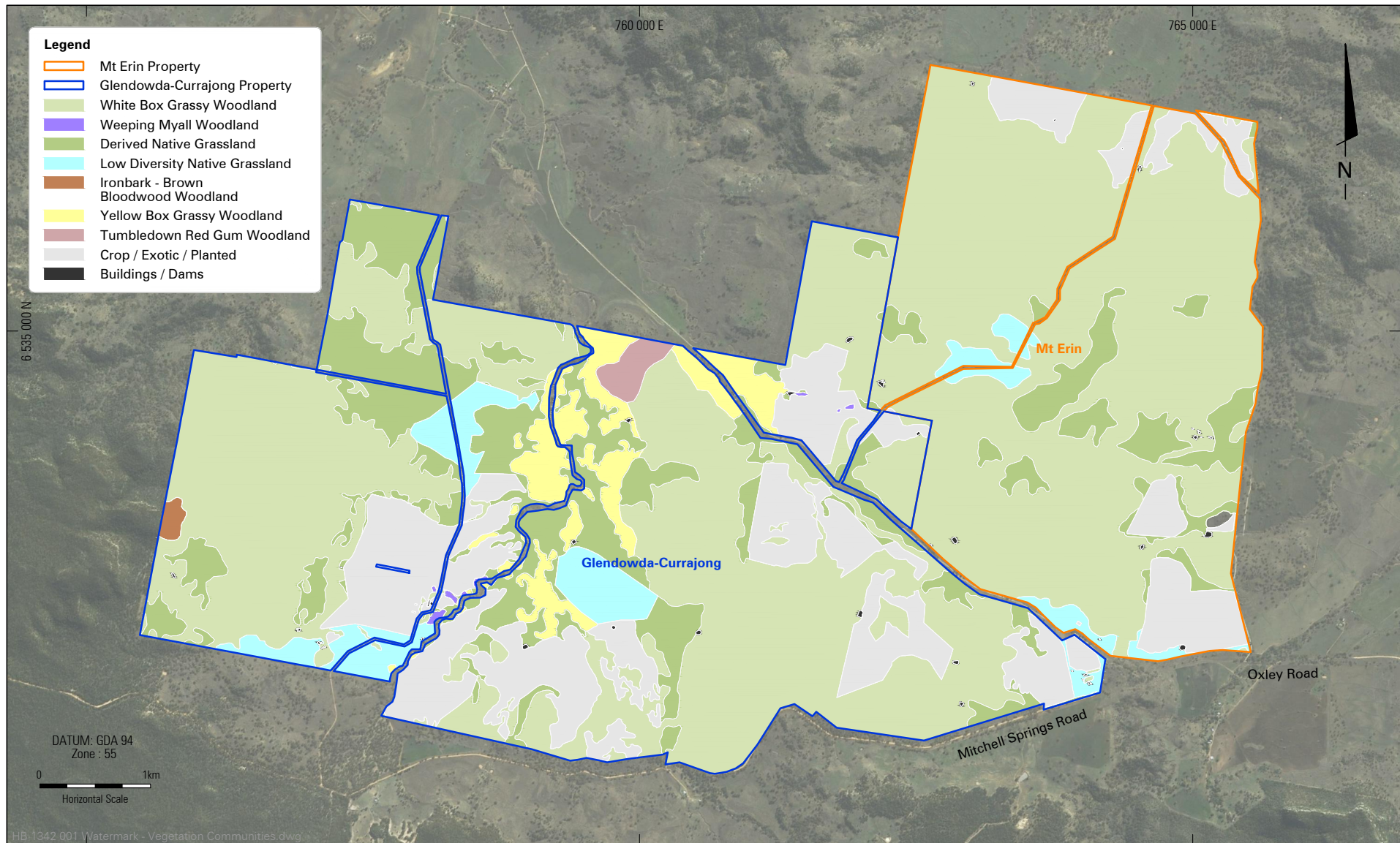
A suite of vegetation communities has been identified within the Onsite and Offsite Biodiversity Offset Areas. **Table 55** summarises the vegetation communities recorded in the Project Boundary and each of the Onsite and Offsite Biodiversity Offset Areas. The Onsite and Offsite Biodiversity Offset Areas provide 4,421 ha of Box Gum Woodland and Derived Native Grassland, 3 ha of other Endangered Ecological Communities (EEC) and 2,745 ha of other native vegetation.

Vegetation mapping within the Additional Offsite Offset Areas is shown in **Figure 74**.

Table 55
Summary of Biodiversity Offset Strategy for the Project

Vegetation Community	TSC Act Status	EPBC Act Status	Disturbance Area (ha)	Retained (ha)	Revegetated (ha)	Rehabilitated (ha)	Total (ha)
White Box Grassy Woodland	EEC	CEEC	517	2,872	1,156	1,631	5,659
Regenerating White Box Grassy Woodland	EEC	CEEC	28	0	0	0	0
Blakely's Red Gum Grassy Woodland	EEC	CEEC	89	0	0	313	313
Regenerating Blakely's Red Gum Grassy Woodland	EEC	CEEC	17	0	0	0	0
Yellow Box Grassy Woodland	EEC	CEEC	14	182	795	31	1,008
White Box/Yellow Box/Blakely's Red Gum Woodland	EEC	CEEC	0	269	563	0	832
Derived Native Grassland	EEC	CEEC	73	0	0	0	0
Subtotal Box Gum Woodland (CEEC)			738	3,323	2,514	1,975	7,812
Inland Grey Box Grassy Woodland	EEC	EEC	30	0	70	46	116
Weeping Myall Woodland	EEC	EEC	3	3	5	0	8
Brigalow	EEC	EEC	0	0	0	0	0
Semi-evergreen Vine Thicket	EEC	EEC	0	0	0	0	0
Fuzzy Box Woodland	EEC		18	0	0	36	36
Subtotal Other EEC			51	3	75	82	160
Poplar Box Woodland			45	1	22	73	96
Belah Woodland			1	0	0	0	0
Whitewood Woodland			13	30	31	27	88
Tumbledown Red Gum Grassy Open Woodland			16	20	0	39	59

Vegetation Community	TSC Act Status	EPBC Act Status	Disturbance Area (ha)	Retained (ha)	Revegetated (ha)	Rehabilitated (ha)	Total (ha)
White Box Shrubby Woodland			24	574	0	171	745
Regenerating White Box Shrubby Woodland			43	0	0	0	0
Blakely's Red Gum Shrubby Woodland			6	0	0	17	17
Blakely's Red Gum Motherumbah Shrubby Woodland			0	47	0	0	47
Dwyer's Red Gum Grassy Woodland			0	19	0	0	19
Heathy Shrubland			0	1	0	0	1
Red Gum Riparian Woodland			0	0	44	0	44
Ironbark - Bloodwood Woodland			0	7	0	0	7
Red Stringybark /Blakely's Red Gum Open Forest			0	304	0	0	304
Red Stringybark/Rough-barked Apple Open Forest			0	1,217	0	0	1,217
New England Blackbutt Open Forest			0	170	0	0	170
Orange Gum - Ironbark Open Forest			0	293	0	0	293
Manna Gum Riparian Forest			0	24	0	0	24
River Oak Riparian Forest			0	38	0	0	38
Subtotal Other Woodland			148	2,745	97	327	3,169
Low Diversity Native Grassland			1,691	0	0	0	0
Cropland / Exotic Pasture			1,393	0	0	0	0
Cleared Areas (roads, dams, buildings, etc.)			63	16	0	0	16
Subtotal Other			3,147	16	0	0	16
TOTAL			4,084	6,087	2,686	2,384	11,157



WATERMARK COAL PROJECT

Threatened Species

All of the threatened flora and fauna species known to occur have cumulatively been recorded across the Onsite and Offsite Biodiversity Offset Areas. Suitable habitat for these species has also been identified within most biodiversity offset areas. Additionally, the Onsite and Offsite Biodiversity Offset Areas provide known and potential habitat for the species potentially occurring within the Project Boundary.

The Biodiversity Offset Strategy provides substantial compensatory habitat for woodland communities proposed to be cleared and so there will be a significant net increase in total woodland area in the medium to long term. The Koala, threatened bird and threatened bats are all woodland species that will benefit from the Biodiversity Offset Strategy and the proposed increase in woodland cover in the long term.

Strategic Values

The Onsite and Offsite Biodiversity Offset Areas were selected based on a number of considerations. The results from the assessment of these areas confirm that each contains a suite of strategic values that demonstrate their suitability as offsets for the Project. **Table 56** summarises the strategic values of the Biodiversity Offset Strategy.

Summary

Assessment of the Biodiversity Offset Strategy using a number of methods have indicated that the offsets proposed for the Project will adequately offset these impacts (see **Appendix F**). The Biodiversity Offset Strategy will protect approximately 6,071 ha of woodland and open forest, revegetate 2,686 ha of woodland and rehabilitate 2,384 ha of woodland. This includes a total of 7,812 ha of Box Gum Woodland and Derived Native Grassland CEEC, 160 ha of other listed EECs and 3,169 ha of other woodland vegetation.

When the 50% discount is applied to the mine rehabilitation areas the Biodiversity Offset Strategy provides the following offset ratios:

- 9.2:1 for Box Gum Woodland and Derived Native Grassland;
- 2.3:1 for other EECs; and
- 20.3:1 for other native vegetation.

The Biodiversity Offset Strategy includes significant areas of known and potential habitat for the suite of species predicted to be impacted by the Project. The Onsite Biodiversity Offset Areas will also provide a significant area of conservation land within the locality of the Project and the Offsite Biodiversity Offset Areas will build into existing conservation areas and offset areas.

The long term objective of the Biodiversity Offset Strategy is to provide for a net benefit to flora and fauna within the locality and region, substantially increasing the proportions of native woodland in conservation tenure. When the avoidance, mitigation and Biodiversity Offset Strategy is considered, no significant impacts are predicted to occur to threatened communities and species as a result of the Project, and the Project will provide a major ecological benefit in the medium to long term.

Table 56
Summary of Strategic Values of the Biodiversity Offset Strategy for the Project

Strategic Values	Onsite Offset Areas				Offsite Offset Areas	
	Mt Watermark Offset Area	Revised Offset Area 6	Mooki River Offset Area	Mine Rehabilitation Area	Existing Offsite Offset Area	Additional Offsite Offset Area
Are proximate to the location of the Project	✓	✓	✓	✓		
Contain comparable, or “like for like” vegetation community types to the vegetation within the Disturbance Area	✓	✓	✓			✓
Contain areas of CEECs, including Box Gum Woodland	✓	✓			✓	✓
Contain known habitat for the Koala	✓	✓				✓
Contain known habitat for threatened species predicted to be impacted by the Project	✓	✓			✓	✓
Contain potential habitat for threatened species predicted to be impacted by the Project	✓	✓			✓	✓
Portions of the properties have the potential to be improved, revegetated ore rehabilitated to provide additional areas of CEECs	✓	✓		✓	✓	✓
Portions of the properties have the potential to be improved, revegetated or rehabilitated to provide additional areas of threatened species habitat	✓	✓	✓	✓	✓	✓
Can secure valuable “stepping stone” patches of remnant forest in a largely cleared, agricultural landscape	✓	✓				
Portions of the properties have the potential to be improved and revegetated to provide additional connectivity	✓	✓	✓	✓	✓	✓
Are connected directly or indirectly to existing conservation reserves					✓	✓
Are connected directly or indirectly to biodiversity offsets for other projects					✓	

4.14.2 Adequacy of Biodiversity Offsets

This section responds to submissions from stakeholders in relation to the adequacy of the Biodiversity Offset Strategy. This includes adequacy in the provision of woodland and threatened species habitat as well as adequacy assessments.

Submission reference: RA9, RA17, SIG2, SIG6, SIG9, SIG10, P39 and P88

Summary response: An assessment of the revised Biodiversity Offset Strategy, having regard to State and Commonwealth offsetting methods, has indicated that the biodiversity offsets proposed for the Project will adequately compensate the impacts of the Project on biodiversity values. The Biodiversity Offset Strategy will protect approximately 6,071 ha of woodland and open forest, revegetate 2,686 ha of woodland and rehabilitate 2,384 ha of woodland. The Biodiversity Offset Strategy also includes significant areas of known and potential habitat for the suite of species predicted to be impacted by the Project.

When the avoidance, mitigation and Biodiversity Offset Strategy is considered, no significant impacts are predicted to occur to threatened communities and species as a result of the Project, and the Project will provide a major ecological benefit in the medium to long term.

Vegetation Communities

The Biodiversity Offsets Report (**Appendix F**) details the extent of each vegetation community within the Onsite and Offsite Biodiversity Offset Areas. The Biodiversity Offset Strategy has been augmented by the acquisition of the Additional Offsite Offset Area, which was acquired in consultation with officers of OEH, DOE and DP&I. Box Gum Woodland, and other woodland types, will be well catered for within the Biodiversity Offset Strategy.

The Biodiversity Offset Strategy will provide for a substantial conservation outcome for woodland vegetation and this has been demonstrated in three ways:

- By comparison of the ratio of offset to impact area and comparison of the proposed offset ratios to precedents set by recent NSW mine approvals;
- By completion of BioBanking assessments to assess the biodiversity credits that are required for the clearing of Box Gum Woodland and other woodland, versus the credits that can be obtained for the Biodiversity Offset Strategy; and
- By completion of an assessment that uses the Commonwealth *Offsets Assessment Guide* for MNES.

Whether assessed by the ratio method, the BioBanking method or the Commonwealth Offset Calculator, the Biodiversity Offset Strategy is clearly more than adequate to compensate for predicted impacts to woodland vegetation. Where there is a shortfall in like-for-like vegetation, additional areas of communities of higher conservation value have been included (which is accepted under the *NSW Offset Principles for Major Projects*).

As has been explained in the EIS, the Biodiversity Offset Strategy will also entail revegetation of derived native grassland (and some low diversity native grassland) to woodland. There will therefore be a significant net increase in total woodland area in the medium to long term.

Threatened Species

The Biodiversity Offsets Report (**Appendix F**) details the occurrence of threatened species known to be impacted by the Project within each of the Offset Areas. All of the threatened flora and fauna species known to occur have cumulatively been recorded across the Onsite and Offsite Biodiversity Offset Areas. Suitable habitat for these species has also been identified within most biodiversity offset areas. Additionally, the Onsite and Offsite Biodiversity Offset Areas provide known and potential habitat for the species potentially occurring within the Project Boundary.

There will inevitably be differences in species assemblages between the Project Boundary and Offsite Biodiversity Offset Areas, as they are not located in the immediate vicinity of each other. Despite this, the Offsite Biodiversity Offset Areas provide habitat for threatened species known and predicted to occur within the Project Boundary, as well as additional species.

The Biodiversity Offset Strategy provides substantial compensatory habitat for woodland communities proposed to be cleared and so there will be a significant net increase in total woodland area in the medium to long term. The Koala, threatened bird and threatened bats are all woodland species that will benefit from the Biodiversity Offset Strategy and the proposed increase in woodland cover in the long term. The Biodiversity Offset Strategy will appropriately address the impacts to threatened fauna species in the long term.

Matters of National Environmental Significance

Bothriochloa biloba

The DOE submission requested evidence of compensation that will be provided for the loss of this population. As outlined previously, the *Bothriochloa biloba* individuals that will be removed are not considered to comprise a discrete population, but form a population together with the other specimens. Notwithstanding this, a comprehensive Biodiversity Offset Strategy has been prepared for the Project to offset the residual impacts of the Project, including those to *Bothriochloa biloba*.

Bothriochloa biloba is known to occur within the additional Offsite Biodiversity Offset Area. It has been recorded in both partially modified (derived native grassland) and heavily modified areas (exotic pasture). Where recorded the species occupies 5-25% of cover within the vicinity of these locations. The species occurs in White Box Grassy Woodland, Yellow Box Grassy Woodland, Derived Native Grassland, Low Diversity Native Grassland and Cropland / Exotic Pastures. Extensive areas of suitable habitat occur throughout the Additional Offsite Biodiversity Offset Area within the grassy woodland and grassland areas.

The Biodiversity Offset Strategy will provide large areas of known and potential suitable habitat for this species that is expected to be higher quality than that being removed. The land to be provided in the Biodiversity Offset Strategy will be managed for conservation and is expected to provide higher quality habitat over time to that being removed.

The proposed offset for *Bothriochloa biloba* is considered to be consistent with the principles in the *EPBC Act Offsets Policy* (SEWPac, 2012), in particular the following principles:

“1. Suitable offsets must deliver an overall conservation outcome that improves or maintains the viability of the protected matter.

4. Suitable offsets must be of a size and scale proportionate to the residual impacts on the protected matter.”

Adequacy Assessment

The adequacy of the Biodiversity Offset Strategy has been assessed using a number of methods, including:

- Ratios: Calculation of the ratios of areas of vegetation within proposed offsets and expressing such areas as a ratio for the areas of vegetation proposed to be cleared. The intention is to demonstrate that offsets are several times the size of the proposed impact area so as to provide for a net gain in biodiversity;
- OEH Offset Principles for Offsets for Major Projects (OEH, 2013a): OEH has developed seven principles for assessing impacts to biodiversity values and determining acceptable offsets. Within these principles, the losses and gains of a Project and its offsets can be assessed using established assessment tools, such as BioBanking; and
- DOE Offset Principles (SEWPac, 2012): DOE has developed eight principles for determining the suitability of offsets for a Project. The Offsets Assessment Guide, which accompanies this policy, has been developed in order to give effect to the requirements of this policy, utilising a balance sheet approach to measure impacts and offsets.

The results of each assessment of adequacy are present within the Biodiversity Offsets Report (**Appendix F**). Assessment of the Biodiversity Offset Strategy, using the above methods has indicated that the offsets proposed for the Project will adequately offset these impacts. The Biodiversity Offset Strategy will protect approximately 6,071 ha of woodland and open forest, revegetate 2,686 ha of woodland and rehabilitate 2,384 ha of woodland. This includes a total of 7,812 ha of Box Gum Woodland and Derived Native Grassland, 160 ha of other listed Ecologically Endangered Communities and 3,169 ha of other woodland vegetation. The Biodiversity Offset Strategy includes significant areas of known and potential habitat for the suite of species predicted to be impacted by the Project.

When the avoidance, mitigation and Biodiversity Offset Strategy is considered, no significant impacts are predicted to occur to threatened communities and species as a result of the Project, and the Project will provide a major ecological benefit in the medium to long term.

4.14.3 Biophysical Strategic Agricultural Land within Biodiversity Offsets

This section responds to submissions raised in relation to the presence of Biophysical Strategic Agricultural Land within the Onsite Biodiversity Offset Areas.

Submission reference: RA9, SIG9, SIG10, SIG12 and P8

Summary response: Shenhua Watermark has excluded all of the BSAL (696 ha) that was initially in Offset Area 6 and high quality agricultural land within the additional offsite biodiversity from the Biodiversity Offset Strategy for the Project to allow for its continued agricultural use. This concession has ensured BSAL will not be subject to a change of land use or taken out of production as a result of the Biodiversity Offset Strategy for the Project.

Offset Area 6

Numerous stakeholders raised concern regarding the quantum of BSAL within Offset Area 6 (part of the Onsite Offset Areas). In response, Shenhua Watermark has excluded all of the BSAL that was initially in Offset Area 6 (696 ha) from the Biodiversity Offset Strategy for the Project to allow for its continued agricultural use (see **Section 4.19** of this RTS). The revised Biodiversity Offset Strategy does not include this area.

Additional Offsite Biodiversity Offset Area

The Additional Offsite Biodiversity Offset Area has been added to the Biodiversity Offset Strategy for the Project since the exhibition of the EIS to compensate for the removal of land previously included in Offset Area 6.

Since exhibition of the EIS, DP&I have released further draft BSAL mapping throughout the State. This draft mapping indicates that there may now be some BSAL in the Additional Offsite Biodiversity Offset Area. However, the Namoi CMA land capability mapping of these properties shows the best land capability present being Class IV and V and therefore this does not comply with the criteria for BSAL in the SRLUP, which requires a minimum of Class III land capability.

Nonetheless, to remove the potential for land use conflict, any land currently cultivated or historically cropped (as evidenced from the lack of native vegetation) within the Additional Offsite Biodiversity Offset Area has been annexed out of these offset properties and will remain 514 ha of existing agricultural land on the Additional Offsite Biodiversity Offset Area will be maintained for continued agricultural production.

Section 4.19.2 of this RTS provides further discussion regarding BSAL within the biodiversity offsets for the Project and the concessions adopted to avoid/reduce such land being subject to a land use change for biodiversity conservation.

4.14.4 Revegetation of Low Diversity Native Grassland and Cropland/Exotic Pasture

This section responds to submissions from stakeholders in relation to the revegetation of Low Diversity Native Grassland and Cropland / Exotic Pasture and inclusion of this land within the Biodiversity Offset Strategy.

Submission reference: RA9, RA17, SIG8 and SIG10

Summary response: Amendments to the Biodiversity Offset Strategy has resulted in less reliance on the revegetation of Low Diversity Native grassland and Cropland / Exotic Pasture. Despite this, extensive areas of Low Diversity Native grassland and Cropland / Exotic Pasture will be revegetated to woodland in parts of the Onsite and Offsite Biodiversity Offset Areas to provide both threatened species habitat and additional areas of CEEC vegetation.

A Biodiversity Offset Management Plan will be prepared that details the management of the Onsite and Offsite Biodiversity Offset Areas, including the revegetation of grassland and agricultural areas.

The Biodiversity Offset Strategy for the Project has been amended since the exhibition of the EIS. Additional areas of intact woodland have been included within the Additional Offsite Biodiversity Offset Area and the extent of Offset Area 6 has been reduced. As such, the Biodiversity Offset Strategy places significantly less reliance on this revegetation of Low Diversity Native grassland and Cropland / Exotic Pasture. Despite these, extensive areas of Low Diversity Native grassland and Cropland / Exotic Pasture will be revegetated to woodland in parts of the onsite and Offsite Biodiversity Offset Areas. The purpose of such woodland revegetation will be to provide both threatened species habitat and additional areas of CEEC vegetation.

Trees and shrubs can feasibly be replanted in the locality, as evidenced by various plantings that have occurred on farmland in the locality. It is not contended that the revegetated areas will be a facsimile of the original woodland in that it is not likely to have the same complement of native herbs and grasses. It will also have some exotic herbaceous plants within it. However, broad areas of such grassland and agricultural land will be revegetated with trees and shrubs and as such it is predicted that sufficient native trees and shrubs will be reintroduced to provide self-regenerating vegetation. In the long term a number of these areas will form woodland that fulfils the criteria of the listing of Box Gum Woodland under the EPBC Act. The risks associated with the revegetation of grassland and agricultural areas have been taken into account within the assessment using the DOE *Offsets Assessment Guide*.

The Biodiversity Offsets Report (**Appendix F**) contains the extent of existing woodland, revegetation and rehabilitation within the onsite and Offsite Biodiversity Offset Areas. A Biodiversity Offset Management Plan will be prepared that details the management of the onsite and Offsite Biodiversity Offset Areas, including the revegetation of grassland and agricultural areas.

4.14.5 Mine Rehabilitation

This section responds to submissions from stakeholders in relation to the inclusion of mine rehabilitation within the Biodiversity Offset Strategy.

Submission reference: RA9, RA17, SIG8, SIG10 and P11

Summary response: Amendments to the Biodiversity Offset Strategy has resulted in less reliance on the rehabilitation of the mining areas. Despite this, 2,384 Ha will be rehabilitated within the Mine Rehabilitation Offset Area to support listed and non-listed biodiversity values in the long term.

The Biodiversity Offset Strategy for the Project has been amended since the exhibition of the EIS. Additional areas of intact woodland have been included within the Additional Offsite Biodiversity Offset Area and the extent of Offset Area 6 has been reduced. As such, the Biodiversity Offset Strategy places significantly less reliance on rehabilitation of the mining areas. Despite this, 2,384 ha will be rehabilitated within the Mine Rehabilitation Offset Area.

It is predicted that the rehabilitated woodland will provide habitat for Koala and other threatened fauna in the long term. However, such rehabilitation will not have the same complement of native herbs and grasses as the original communities. The principle objective of the rehabilitation strategy will be to recreate and establish, as best as possible, a self-sustaining post mining landscape that resembles the pre-mining vegetation communities and is able to support a diverse range of viable flora and fauna populations. The rehabilitated woodland will provide substantial additional habitat in the long term and such habitat will be connected via corridors to habitats in the Revised Offset Area 6 and those beyond the Project Boundary (e.g. in Breeza State Forest).

A summary of offset ratios for the Project has been provided in the Biodiversity Offsets Report (**Appendix F**). The summary includes ratios for scenarios including rehabilitation (discounted at 50%) and excluding rehabilitation. Within the Biodiversity Offsets Report it is noted that, a discount of 50% has been applied to the Mine Rehabilitation Area, as has been accepted for other mining projects in NSW in recent times. As such the offset ratios reported include mine rehabilitation.

4.14.6 Management of Biodiversity Offsets

This section responds to the submissions from stakeholders in relation to the management of the Project's biodiversity offset areas.

Submission reference: RA9, RA12, RA17 and SIG10

Summary response: The Project's biodiversity offset areas will be managed by an overarching Biodiversity Offset Management Plan.

Revised Offset Area 6

The Revised Offset Area 6 is proposed to include revegetation of 1,112 ha of land for the purpose of providing both threatened species habitat, particularly the Koala, and additional areas of CEEC vegetation. The provisions for the management of this land will be provided within the Biodiversity Offset Management Plan. Information to be contained within the Biodiversity Offset Management Plan includes:

- An indicative map showing which vegetation communities will be revegetated in which areas; and
- An indicative list of species included within the revegetation areas to ensure the dual outcomes for Koalas and CEECs is met.

Mooki River Offset Area

The Mooki River Offset Area will be actively managed according to a Biodiversity Offset Management Plan that is being prepared on behalf of Shenhua Watermark. The Biodiversity Offset Management Plan will include provision for consultation with the Department of Primary Industries (Fisheries NSW) regarding the management and rehabilitation of the riparian area within the Mooki River Offset Area.

Onsite and Offsite Biodiversity Offset Areas

Shenhua Watermark has committed to the preparation of a Biodiversity Offset Management Plan that will ensure all the conservation objectives and actions proposed will be implemented. This document is currently in preparation and as such some of the specifics requested by DOE cannot be provided at this time. The recommended inclusions specified by DOE will be considered for inclusion within the Biodiversity Offset Management Plan.

4.14.7 Security of Biodiversity Offsets

This section responds to submissions from stakeholders in relation to the security of the Onsite and Offsite Biodiversity Offset Areas.

Submission reference: RA9, SIG8, SIG10 and P11

Summary response: The mechanism for the security of biodiversity offset areas will be determined in consultation and to the satisfaction of relevant government agencies. Notwithstanding this, the biodiversity offset areas will be conserved in perpetuity.

Section 4.2.6 of the Ecological Impact Assessment discussed the security of the offsets. Shenhua Watermark proposes to secure all offsets so that they are permanently conserved. The mechanism for such offset security may vary between offsets within the Biodiversity Offset Strategy. It will be determined in consultation and to the satisfaction of relevant government agencies following project determination.

Deep underground coal resources are known to exist beneath the Onsite Biodiversity Offset Areas. Any potential future exploration in respect of these resources will not impact on the offsetting values of the Onsite Biodiversity Offset Areas. Furthermore, any potential underground mining operation in this area will be subject to the relevant approvals in the future and will ensure that the offsetting values of the Onsite Biodiversity Offset Areas are maintained.