ROLLESTON COAL EXPANSION PROJECT



Amendment to
Regional Interests Development Application
Glencore RPI16/RPI/001

12 September 2016

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1 Amendment Application

Background to this amendment

- On 31 March 2016, the Rolleston Joint Venture (RJV), through Glencore Coal Queensland Pty Ltd, submitted a Regional Interests Development Approval (RIDA) Application, seeking approval under section 53 of the RPI Act to undertake a resource activity, specifically coal mining, as part of the RCEP, within areas of regional interest under the Central Queensland Regional Plan (CQ Regional Plan).
- 1.2 The application included a Supporting Information Report, to meet the requirements of section 29(b) of the RPI Act which requires an assessment application to be accompanied by a report:
 - (a) assessing the impacts of the resource activity on the area of regional interest; and
 - (b) identifying any constraints on the configuration or operation of the activity.
- 1.3 The application and the Supporting Information Report provided an assessment of the RCEP pursuant to criteria within the RPI Regulations 2014 and impacts on two areas of regional interests: Priority Agricultural Area (**PAA**) and Strategic Cropping Area (**SCA**). The application noted that RCEP had an impact on 74.68 ha on Priority Agricultural Land Use (**PALU**) within a PAA; and 115.29 ha of SCA. The PALU area was also wholly contained with the impacted SCA.
- 1.4 An updated RIDA Application and Supporting Information Report were submitted on 13 April 2016. The extent of proposed PALU and SCA impact did not change.
- 1.5 On 15 April 2016, the Department of Infrastructure, Local Government and Planning (**the Department**) provided RJV with a Requirement Notice seeking further information on details associated with the RJV's RIDA application.
- 1.6 Specifically, the Department sought further details in relation to the following matters:
 - (a) Confirmation on location and area of resource activities and definitions
 - (b) Clarification on the RJV's assessment against PAA criteria; and
 - (c) Provision of shapefiles for SCA
- 1.7 RJV provided a response to the Requirement Notice on 22 April 2016.
- 1.8 On 2 June 2016, on the basis of information it received from RPI Regulation advisory agencies, Department of Agriculture and Fisheries (**DAF**) and the Department of Natural Resources and Mines (**DNRM**), the Department provided its review of RJV's Requirement Notice response of 22 April 2016. In effect, the Department advised that the 74.68 ha of PALU permanently impacted by RCEP would require land based mitigation, which had not been proposed by RJV.
- 1.9 Prior to finalising its response, RJV undertook further consultation with officers of the Department and officers from DAF; and subsequently engaged a soil technical consultant to advise on the provision of 74.68 ha of land as a potential land mitigation, as part of the mitigation for the total SCA/PALU impact of 115.29 ha.

- 1.10 In its response to the Department of 15 July 2016, RJV committed to make 74.68 ha available for cropping on a like for like basis to the area impacted by RCEP (i.e. fodder / forage crop), on the proviso that its SCA liability was limited 40.61 ha (the balance from the total impact of 115.29 ha).
- 1.11 The Department provided its response to RJV's offer on 16 August 2016, which concluded that, based on DAF assessment of the RJV's technical report and its own investigation of the mitigation and impact areas, a mitigation of 156 ha would be required to offset the impacted 74.68ha of PALU. This amount was based on DAF's view of a differential between the potential relative yield between the impact and mitigation areas.
- 1.12 A meeting between RJV's soil expert and DAF to clarify their respective technical assessments led to a refinement of the proposed offset requirement from 156 ha to 103 ha.
- 1.13 Concurrently, Rolleston mine planners have determined that a storage dam (on Lot 3, DSN 590) which alone results in a 65.38 ha impact on PALU, is no longer a site requirement, with other storage options now available which do not compromise the Mine's water management plan.
- 1.14 Removal of the dam would see the impact on PALU reduced to 11.58 ha, with total SCA impact reducing from 115.29 ha to 49.90 ha.
- 1.15 The proposed changes to the Mine Plan have no material effect on the development of the RCEP or other existing approvals, other than a reduction in the Mine's disturbance footprint most relevant to the RCEP areas of regional interest, that is, PAA and SCA.
- 1.16 As outlined in section 2, the changes to the Mine Plan will allow for some reconfiguration of the site's water management systems, with required water storage to be held within mined out pits. To be clear, the water storage option now being pursued by RJV and as outlined within section 2, does not involve any additional disturbance across the RCEP area. Existing disturbed areas will be used in substitution to the previously proposed storage.
- 1.17 This amendment application, made under s 31 of the RPI Act, outlines the proposed changes, the reasons for the change, and the consequential reduction on the area of PAA and SCA to be impacted by RCEP activities. Assessment Table 1 PAA (RO 2), and Assessment Table 2 SCA (RO 2), which provided RJV's response to the PAA and SCA criteria within the RPI Regulations, and were attached to the Supporting Information Report (April 2016), have also been updated and are attached to this amendment application. Consistent with the original application, responses to criteria for SCA RO3 have also been updated and included as Assessment Table 3 SCA (RO 3).

Other than the changes to the PAA and SCA disturbance footprint as outlined in this amendment application, all other information and definitions included within the Supporting Information Report and RIDA Application (April 2016) remain relevant.

2 Description of proposed change

2.1 The following is an outline of the proposed changes to impact on regional interests from activities associated with the RCEP. In effect the changes have been brought about by recent changes to the Mine Plan at Rolleston Mine.

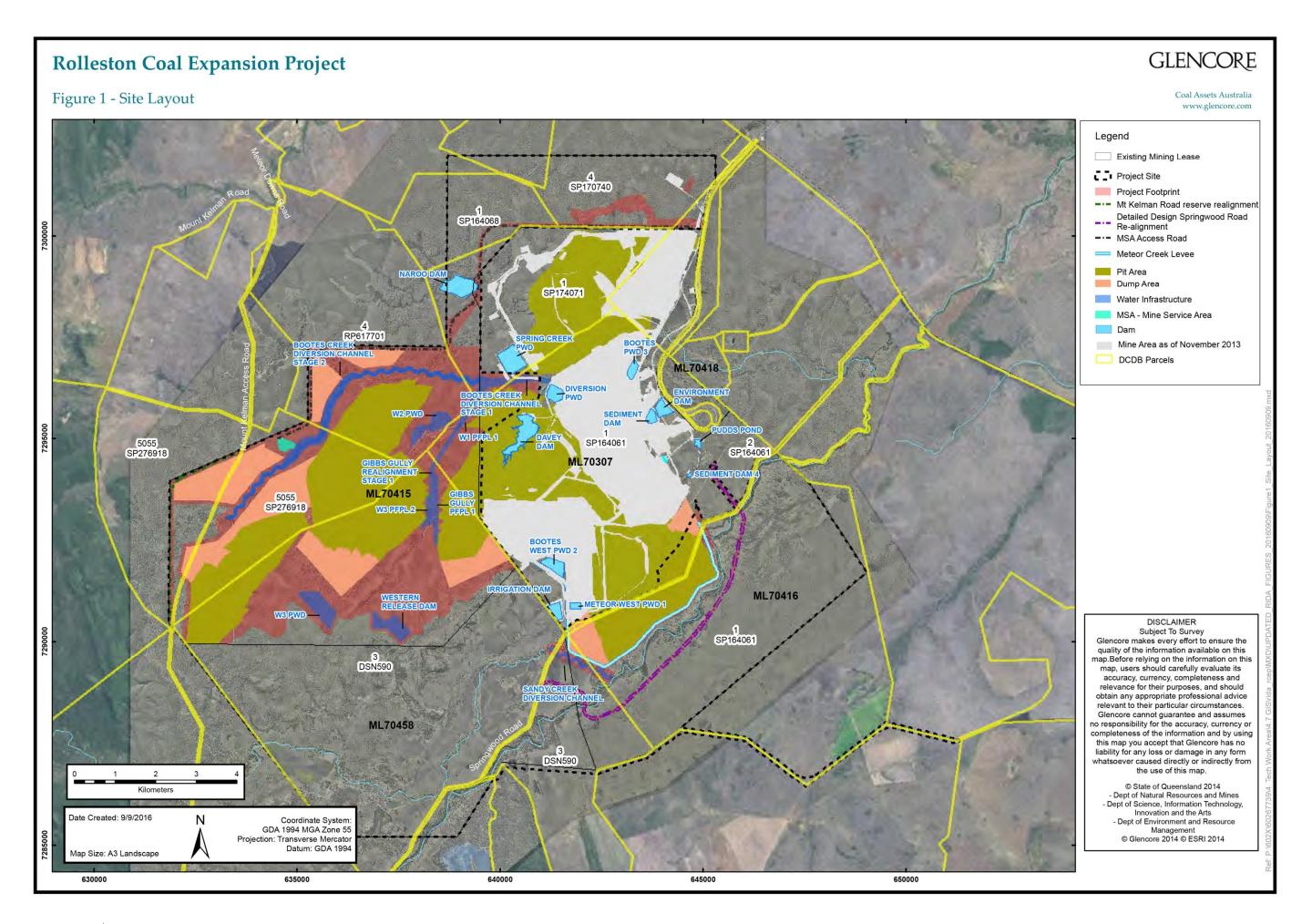
2.2 The effect of this Mine Plan change will lead to an overall reduction in the RCEP's footprint over PAA and SCA.

Changes to Mine Plan

- 2.3 The RCEP had required the construction of a water storage dam as part of the Rolleston South pit water management strategy. Based on the Mine Plan at the time of the EIS, and the projected water inflow rates, the size of the dam required was calculated at one (1) GL in capacity.
- 2.4 Projected water inflow rates were based on mining the Rolleston South Pit concurrently from the east and west with the opening up of two separate mining faces and, as a result, the projected inflow rates were greater than would normally be encountered in a mining area due to the increased surface area of the two mining faces. The Mine Plan now has the Rolleston South pit being mined from the east only (one mining face), with significantly reduced inflow rates than previously modelled.
- 2.5 New modelling has shown that over the life of the Plan, all excess water can be stored within the existing water storage dams (i.e. Irrigation Dam #1 and Scraper Dam) with additional backup storage available within existing disused pit voids.
- 2.6 Consequently, Water Storage Dam #2, originally proposed to be located on Lot 3 on DSN 590 and impacting 65.38 ha of PALU, is no longer required.

Refinement of Springwood Road Realignment

- 2.7 The previous assessment on the impact on PAA and SCA resulting from the realignment of Springwood Road had assumed impact on a 60 metre wide corridor due to the requirement by the DNRM for the road to also provide provision for a stock route, (consistent with the existing Springwood Road).
- 2.8 With the benefit of now being able to use off-design drawings, the width of the road corridor (including the power line) varies across the alignment, and does not impact on the full 60 metres as was calculated for the original RIDA application. The disturbance area typically varies between 15 and 30 metres, (with the width of the contained road pavement only 6 metres). The balance of the corridor will, in the main, be undisturbed by mining activities, while the whole area is available for use as a (non-active) stock route. While the net difference is not large (approximately 5 ha), it does further reduce the overall RCEP's total disturbance calculation on PALU and SCA.
- 2.9 In pre-lodgement discussions with the Department, RJV was advised that while no disturbance is proposed within the balance area, it is still land which is not available for PALU. Consequently, RJV has not reduced the impact on PALU despite there being no disturbance to the balance area. The Springwood Road alignment will remain unchanged from the RJV's April 2016 application material.
- 2.10 Figure 1 (overpage) provides an updated overview of the Project Site and the revised Project Footprint, taking the above changes into account. The April 2016 application also noted that while the RCEP leases encompass approximately 12,758 ha of land, mining was not proposed within the full extent of the Project Site, with direct impacts (the Project Footprint) constrained to a smaller area of some 5,405 ha. With the above changes, the RCEP footprint is now reduced to 5,319.02 ha.



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2.11 Table 1 (below) sets out the updated areas of disturbance for each area of regional interest under the RPI Act, on a lot by lot basis. The key change from the original application is that associated with the reduction of impact on Lot 3 on DSN590, down from 74.68ha to 11.58 ha. This also reduces total impact on SCA to 49.90 ha.

Table 1 - Location and Extent of the proposed activities

Area of Regional Interest	Resource activity	Location	Total area of disturbance PAA and SCA (ha) as applicable	Total area of disturbance PALU (ha)
	Open cut mining, creek diversion channel	18RP617697, 4RP617701	907.88	-
	Access road	18RP617697, 1SP164068	20.14	-
	Water infrastructure, access road	18RP617697, 4SP170740	102.95	-
	Open cut mining, creek diversion channel, access road	18RP617697, 1SP174071	162.28	-
Priority	Open cut mining, creek diversion channel, road realignment	1SP164061	851.45	-
Agricultural Area	Water infrastructure, access road	1SP174071	20.98	-
	Creek diversion channel, road realignment, water infrastructure	3DSN590	1927.99	11.58
	Open cut mining, creek diversion channel, water infrastructure	5055SP276918	1,278.44	-
	Open cut mining, road realignment	Road Parcels	46.91	-
		Total	5,319.02	11.58
	Open cut mining	1SP164061	32.57	-
Strategic Cropping Area	Water infrastructure, creek diversion channel	3DSN590	7.16	-
	Road realignment	1SP164061, 3DSN590	10.17	-
		Total	49.90	-

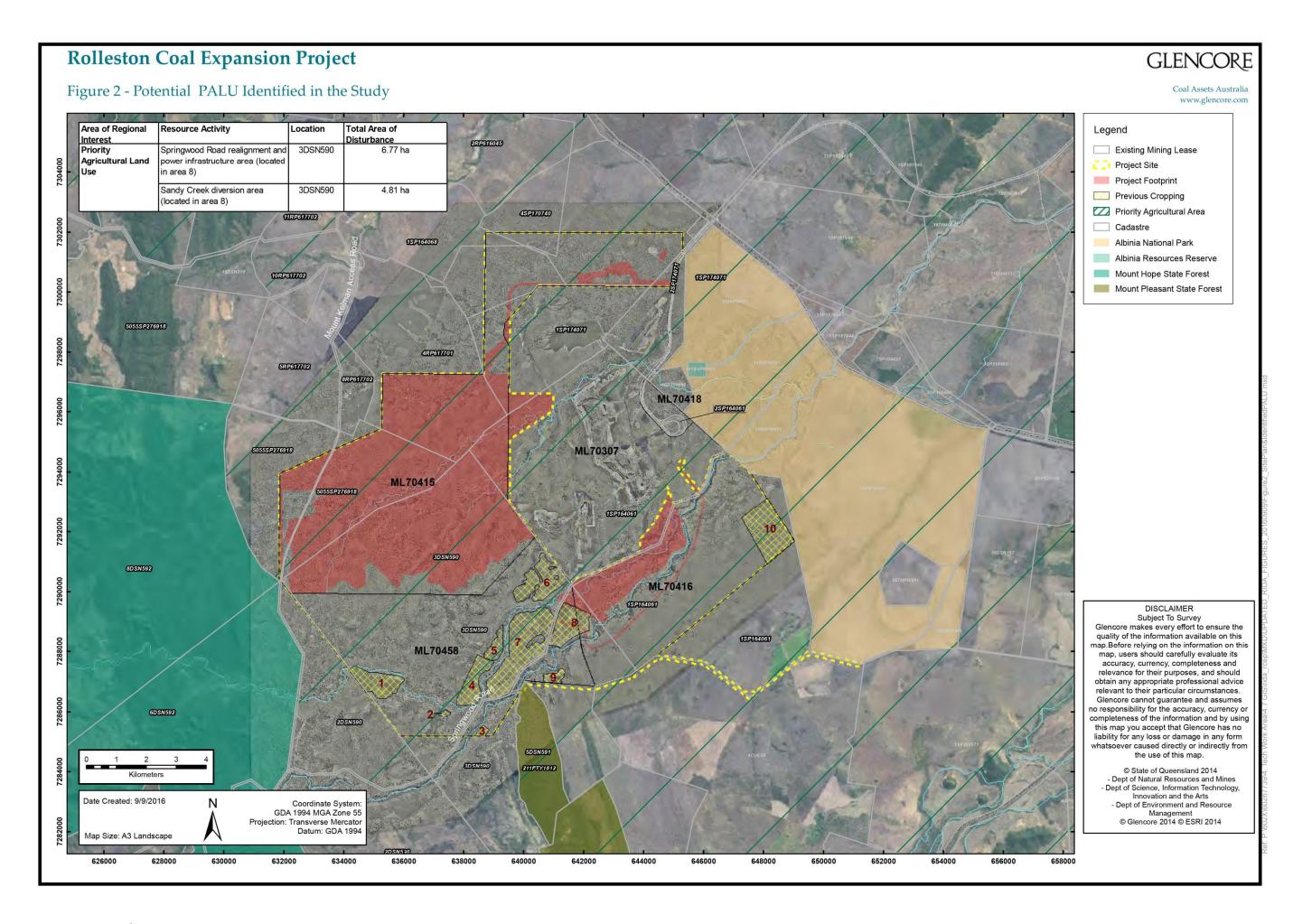
3 Consequences of amendment

3.1 The following is an outline of the consequences of the proposed reduction in the RCEP footprint over areas of regional interest. Further detail is provided in Assessment Table 1 – PAA, and Assessment Table 2 - SCA.

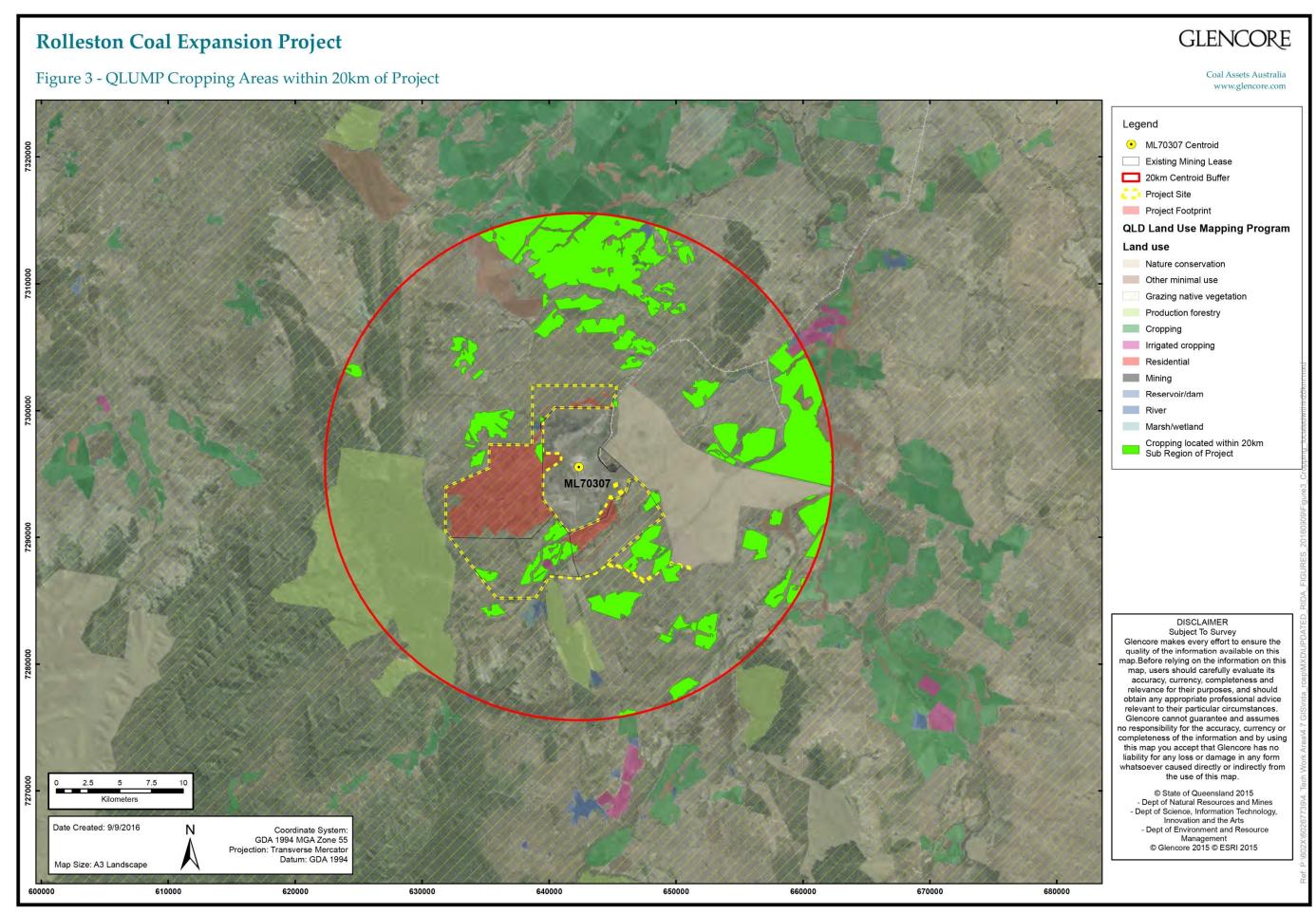
Priority Agricultural Areas

Figure 2 identifies the regional extent of PAA (relative to the Project) based on current government mapping, and the impact the RCEP has on PALU within the identified PAA.

- Following the changes as outlined in section 2, the extent of impact on PALU has now been reduced to 11.58 ha. As there is an impact on an area of regional interest, an assessment has been undertaken for the PAA provisions of the RPI Regulation (that is, Schedule 2, Part 2), on the same basis/reasons as outlined with the original (April 2016) application material.
- The responses to the criteria have been updated and provided in **Assessment Table 1 Priority Agricultural Land (RO 2)**, in the Appendices to this amendment application.
- 3.5 There are no plans to move this dam to another on-site location, with the dam's storage function to be substituted by existing storage dams and storage within a disused (existing) pit, as outlined within section 2.
- 3.6 The 11.58 ha of impacted PALU is fully contained within the 49.90 ha of SCA proposed to be impacted.
- 3.7 Figure 3 identifies the regional extent of potential cropping (relative to the RCEP) based on the Queensland Land Use Mapping Program (QLUMP). Approximately 17,436 ha of cropping (as per QLUMP) has been identified by the Applicant within a 20km (sub-region) of the RCEP project area. On the basis of this data, the extent of loss of PALU from RCEP activities represents approximately 0.07% of potential PALU within the sub-region around the RCEP.
- 3.8 As noted in the original application, as this amendment represents a reduction in total area of PALU impacted, there are no impacts on infrastructure essential to the operation of a PALU (transport, power, water) within either region.
- 3.9 The Applicant considers that Required Outcome 2 has been satisfied: the RCEP will not result in a material impact on the region because of the RCEP's impact on the use of land in the PAA for one or more PALUs. While there is an unavoidable residual impact of 11.58 ha on PALU, for the reasons outlined in the original application, the area of PALU now impacted by the RCEP (at 0.07% of total PALU in the region) is negligible. Such a loss would not be material to PALU in the region.
- 3.10 For the impact on PALU, RJV is prepared to accept a condition to provide \$55,005 towards a Best Management Practice program, as is, for example, delivered by Fitzroy Basin Association (FBA), or an equivalent program. FBA works with various groups, including AgForce, Growcom and Cotton Australia, and the extension network within DAF, to deliver a range of best management practices programs for farmers, through sustainable productivity increases.
- 3.11 The PALU contribution is conditional upon a pro-rata reduction in the extent of RJV's SCA mitigation payment (refer section 3.17).



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Strategic Cropping Area

3.13 As outlined within the original (April 2016) application, the RCEP footprint includes area of land mapped as SCA. With the changes as outlined within section 2, 49.90 ha of the RCEP's disturbance footprint is mapped as SCA, as set out in Table 2 below and Figure 4.

Table 6 - Location and Extent of the SCA Disturbance

Direct Impact Areas	Resource Activity	Location	Total Area of Disturbance (ha)
А	Open Cut Mining Pit	1SP164061	32.57
В	Sandy Creek diversion channel	3DSN590	5.11
С	Sandy Creek diversion channel	3DSN590	2.05
	Springwood Road re-alignment and power infrastructure	1SP164061	4.37
	Springwood Road re-alignment and power infrastructure	3DSN590	5.80
		Total	49.90 ha

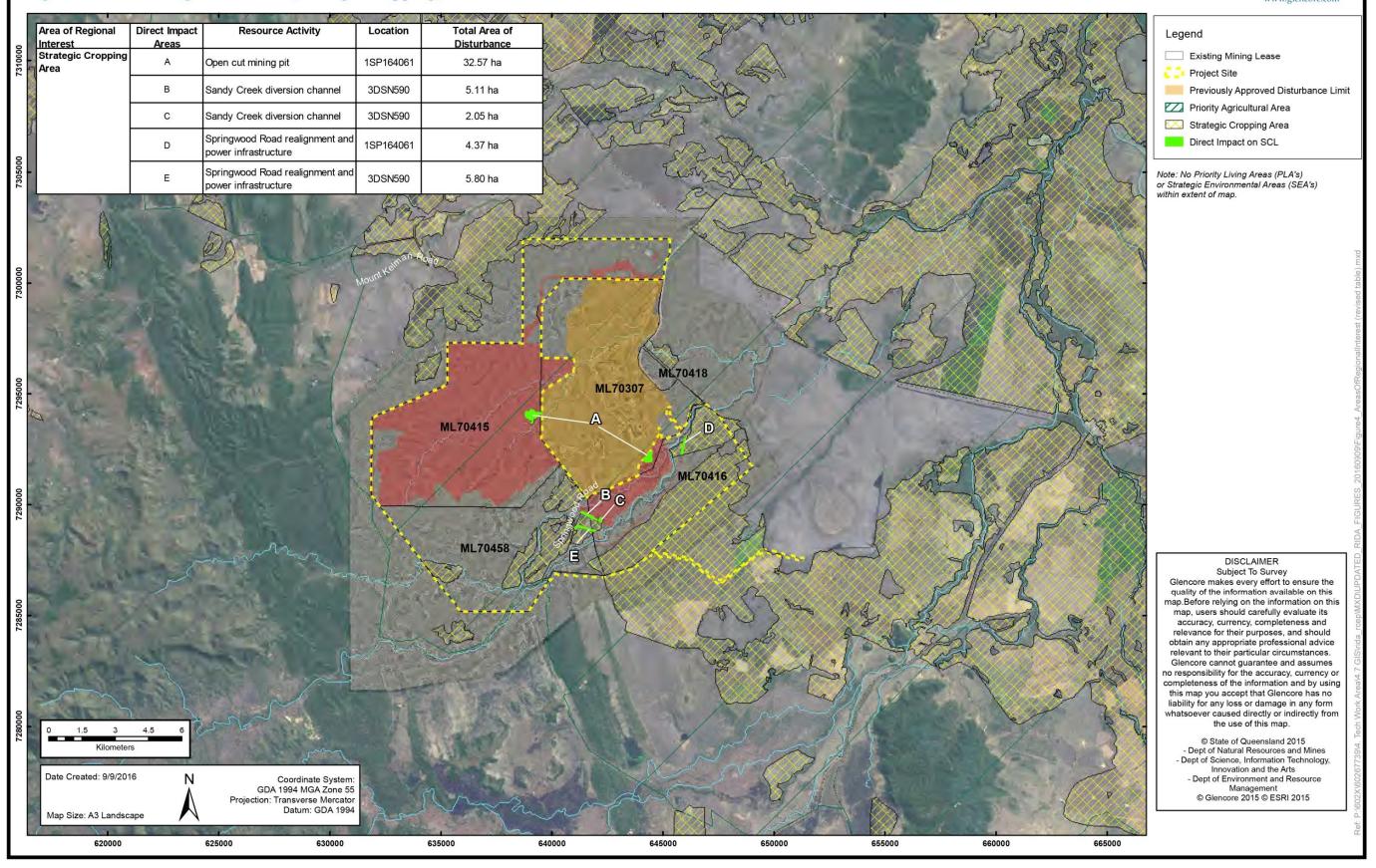
- 3.14 **Assessment Table 2 Strategic Cropping Land (RO2)**, has been updated to take account of the reduction on the RCEP's disturbance footprint on SCA.
- 3.15 As noted in the April 2016 Supporting Information Report, the Applicant or Glencore own the lots of land on which the RCEP is to be carried out, and those lots form a single discrete area as they are adjacent (other than for any road or watercourse between the lots), refer Figure 5. The application involves a single 'property (SCL)' as defined in the RPI Regulation. As a result, the RCEP has been re-assessed against Required Outcome 2 for the SCA. While it remains the Applicant's interpretation that Regional Outcome 2 applies in this instance, an assessment of the RCEP against Regional Outcome 3 is again included, as **Assessment Table 3 Strategic Cropping Land (RO3)**.
- 3.16 The Applicant again demonstrates its compliance with each element of the prescribed solution for Required Outcome 2, including with reference to the 2% impact threshold at Schedule 2 Part 4 Item 11(d) of the RPI Regulation (with 0.53% of total SCA on contiguous Glencore/Joint Venture owned property to be impacted).
- 3.17 The Applicant is willing to accept a condition to mitigate for the impact on SCA in accordance with Part 4 of the RPI Act. Under Part 4 of the RPI Act, mitigation measures may include either a payment to the mitigation fund, the entering into a mitigation deed, or a combination of both. As it has agreed to make a contribution for loss of PALU, RJV is willing to make payment of \$182.020, based on 38.32 ha (that is the nominal 49.90 ha of SCA impacted, less the 11.58 ha mitigation proposed for PALU as a contribution to a recognised productivity program).

Rolleston Coal Expansion Project

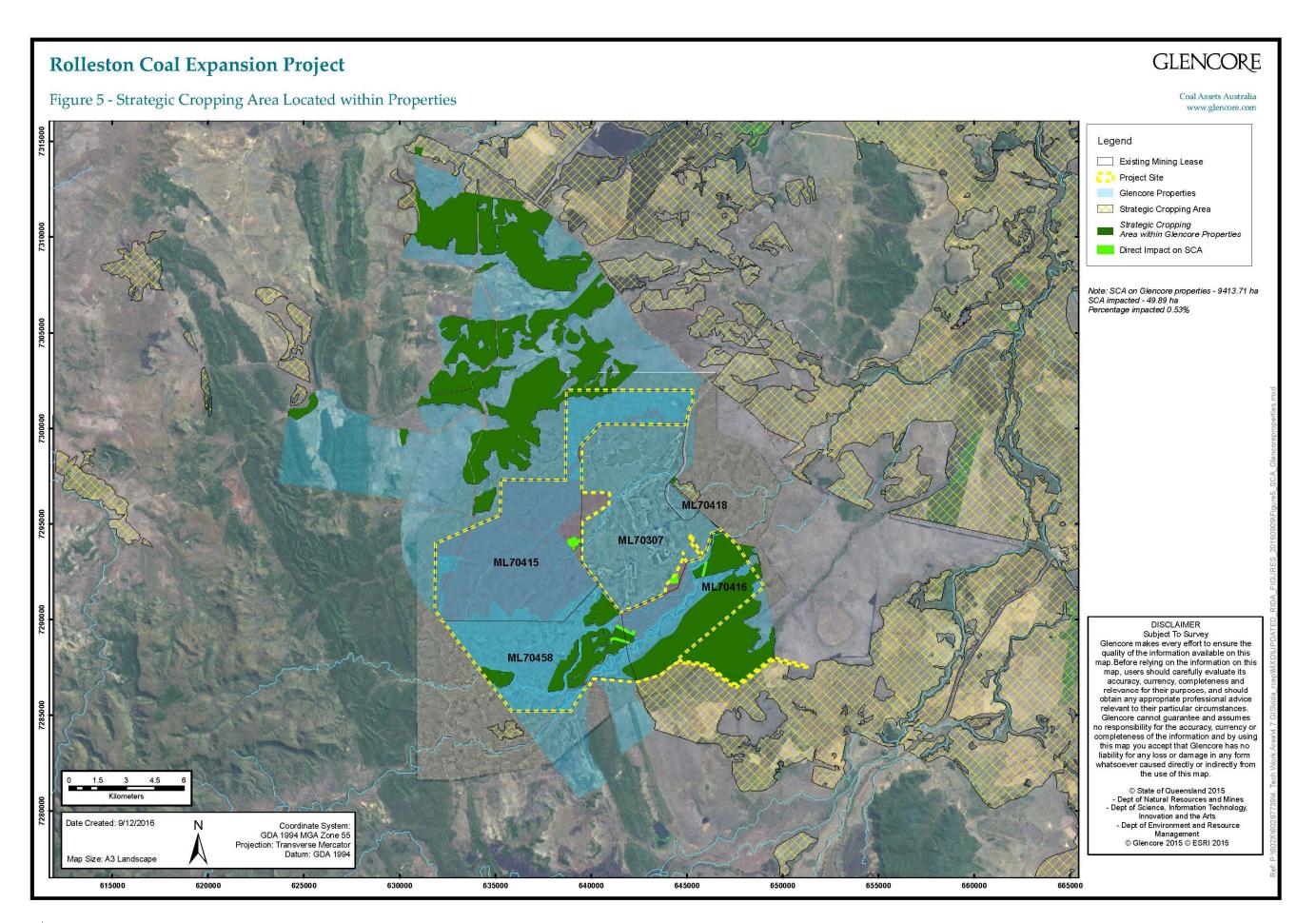
GLENCORE

Figure 4 - Areas of Regional Interest (Strategic Cropping)

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4 Conclusion

- 4.1 Since submission of the RIDA Application in April 2016, there have been updates to the RCEP's Mine Plan. This has resulted in deletion of a 65.38 ha storage dam on Lot 3 on DSN590.
- 4.2 Despite the steps taken towards impact minimisation, the RCEP will have some limited impacts on areas of regional interest. There will be a total 11.58 ha of PALU directly impacted within the RCEP area (being unavoidable due to the requirements of the creek diversion and the road). This residual area of PALU impact is wholly contained within the 49.90 ha of SCA which is proposed to be impacted.
- 4.3 The Applicant is willing to accept a condition for a mitigation payment for the impact on SCA in accordance with Part 4 of the RPI Act. This payment would be based on 38.32 ha of SCA, with the balance (11.58 ha) to be provided as a contribution towards a best practice management program to address the nominal loss of productive capacity on PALU.
- 4.4 The re-assessment carried out by the Applicant as outlined in this amendment application and the following Assessment Tables demonstrates that the RCEP meets the applicable Required Outcomes in relation to this activity.

Appendices

Assessment Table 1 – Priority Agricultural Area

PAA Required Outcome 2	The activity will not result in a material impact on the region because of the activity's impact on the use of land in the priority agricultural area for 1 or more priority agricultural land uses.
Prescribed Solution	Response
 (1) The application demonstrates all of the following— (a) If the activity is to be carried out in a priority agricultural area identified in a regional plan—the activity will contribute to the regional outcomes, and be consistent with the regional policies, stated in the regional plan; 	This criteria is satisfied. Some of the activities associated with the RCEP will be carried out in a PAA as identified in the CQ Regional Plan. The RCEP cannot feasibly develop by avoiding the PAA. The regional policies in the CQ Regional Plan aim to protect PALUs while supporting co-existence opportunities for the resources sector, and providing certainty for the future of towns. Glencore believes that the RCEP is consistent with these policies. The RCEP will contribute to the regional outcome that 'agriculture and resource industries within the Central Queensland Region continue to grow with certainty and investor confidence'. The discussion above highlights the reasons the RCEP needs to proceed – namely to allow the development of resources in the area economically and with investor confidence. Failure to undertake the RCEP would ultimately lead to sterilisation of an identified resource in the area, contrary to the best interests of the State and the Region. In addition, if the RCEP does not proceed, ongoing operations at the Rolleston Coal Mine will be limited with an early closure (the RCEP extends mining by 30 years). This will be damaging to the regional economy which supplies many of the goods and services for the current mining operations and its staff. The early closure of the existing operations would also likely lead to a decline in prosperity of the region as a number of local employees would lose their jobs. The Applicant's ongoing operations at its existing and approved mine are fundamental to the growth and vitality of the Rolleston and Springsure townships. In its various undertakings, the Applicant (through Glencore) has already made substantial contributions to these townships including infrastructure investment and local community grants; for example the recent establishment of five \$10,000 scholarships and a further \$10,000 in student prizes at the Emerald Agricultural College. The RCEP will continue this pattern of investment for the benefit of all residents. To the greatest extent poss

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PAA Required Outcome 2		The activity will not result in a material impact on the region because of the activity's impact on the use of land in the priority agricultural area for 1 or more priority agricultural land uses.
Prescribed Solution		Response
		corridor impact, minimizing its impact on areas identified as used for PALU. The RCEP maximises opportunities for co-existence of resource and agricultural land uses, including by the establishment of mutually beneficial infrastructure.
(b)	the activity cannot be carried out on other land in the region that is not used for a priority agricultural land use, including, for example, land elsewhere on a property, on an adjacent property or at another nearby location;	This criteria is satisfied. The RCEP, as a brownfield expansion of an existing operation, is constrained by its nature in needing to effectively 'co-locate' with the existing operation. However, this also brings benefit in minimizing the overall disturbance area required because of the utilization existing of infrastructure and facilities. Mining activities are also constrained in their operation by the location of the resource deposit and economically feasible methods for its extraction. The RCEP has been designed to allow economic extraction of an identified coal reserve and prevent resource sterilisation.
		The specific aspects of the activity which will impact on land used for a PALU are:
		(a) limited aspects of the proposed Sandy Creek diversion channel;
		(b) the re-alignment of Springwood Road and powerline (in the same construction corridor).
		The location of these items is also constrained by their nature (refer response to Prescribed Solution (c) below). That is, the creek diversion must be located where topography allows for a suitable grade and where the inlet from Sandy Creek and discharge to Meteor Creek will cause minimum disturbance to natural flows and turbulence.
		Springwood Road must be realigned to facilitate development of the mine, and to give safe and effective access. Its location has been designed to account for all user needs while taking account of grade, radius of curves and susceptibility to flooding. Consideration has been given to reduce the likely permanent impact of land within the proposed corridor. Using off design drawings, the corridor impact has been able to be reduced, with the alignment taking up 15-30 metres, and not 60 metres as allowed for in the original application. However, while the balance area will not be disturbed by mining activities, the Department has advised that it does not consider the land is available for PALU; and is to be included in the PALU impact area. RJV has included the full 60 metre corridor as being impacted.
		In summary, the extent of permanent loss of PALU has been able to be reduced from 74.68ha to 11.58 ha, or (on QLUMP data) 0.07% of cropping land within 20km of the Mine.

PAA Required Outcome 2		The activity will not result in a material impact on the region because of the activity's impact on the use of land in the priority agricultural area for 1 or more priority agricultural land uses.
Prescribed Solution		Response
(c)	the construction and operation footprint of the activity on the area in the region used for a priority agricultural land use is minimised	This criteria is satisfied. The disturbance footprint for the RCEP has been minimised to the greatest extent possible while allowing for safe and feasible mining of the identified coal seams.
	to the greatest extent possible;	The RCEP has been designed to allow the extraction of further coal reserves based largely around the use of existing infrastructure, thereby minimizing the overall requirements for land disturbance when compared with an undertaking proposing to construct new infrastructure.
		The RCEP's Water Management System for the Project has been subject to design considerations since 2011 and has been developed to avoid areas of environmental significance, including SCA (SCL as it was known at the time), in the first instance. Where avoidance was not possible, mitigation and management measures were developed.
		Water infrastructure originally proposed for the project that would impact on PALU involves the development of a water storage dam and a diversion of a portion of the Sandy Creek. Following further assessment, as per Figure 2, the storage dam has been deleted from the Mine Plan, with in pit storage on existing disturbed areas now preferred. Detailed design has been completed for the diversions to minimise impacts, considering environmental constraints as well as technical and economic aspects.
		The proposed loss of PALU from the construction of the diversions would not be expected to have any impact on adjacent PALU nor make the areas of adjacent PALU unviable in the future.
		Chapter 2 of the RCEP's EIS includes project justification and design considerations in Section 2.2.2.1 for the Water Management and Supply associated with the project and section 2.2.4 describes locality alternatives. This includes justification for the location of water infrastructure and why certain locations were chosen.
		Chapter 9 of the EIS and Appendix G-1 Surface Water Assessment contain the technical detail around the design justification for the location.
		In summary, the key reasons associated with the decision to locate this infrastructure in this area (based on detailed hydrological work) included:
		 minimising the number of creek diversions required for the project reducing the impact of the project on existing creek systems during modelled flood events (related to

PAA	A Required Outcome 2	The activity will not result in a material impact on the region because of the activity's impact on the use of land in the priority agricultural area for 1 or more priority agricultural land uses.	
Pres	cribed Solution	Response	
		 existing topography) ensuring an appropriate water management system for the project, including minimising the spatial extent of land required to be impacted by additional water management infrastructure. Efficiently linking infrastructure to the existing water management system in place in ML70307 with environmental, geological and topographical constraints. 	
		The EIS and associated submissions report (which addressed all comments raised by submitters on the EIS including those from government agencies) was assessed and recommended to proceed by DEHP subject to public notification processes under the <i>Mineral Resources Act 1989</i> and <i>Environmental Protection Act 1994</i> .	
		The road and powerline realignment has been the subject of extensive assessment, and the option with the least proposed impact on PALU has been selected. The preferred alignment minimises the overall impacts on land used for a PALU while still allowing for safe and efficient access and travel for road users.	
		It should be noted that EIS had 2 options in relation to the Springwood Road re-alignment; since completion of the EIS, Option 1 has been chosen as the final preferred route in consultation with stakeholders. The Project footprint in the RCEP RPI application accords with the footprint based on Option 1, following further detailed design post-EIS.	
(d)	the activity will not result in widespread or irreversible impacts on the future use of an area in the region for 1 or more priority agricultural land uses;	This criteria is satisfied.	
		Widespread impacts on the future use of an area within the region for one or more PALUs will not occur as a result of the RCEP.	
		As noted above, the RCEP has minimised impacts on a PALU. Only 11.58 ha of PALU in total will be impacted by the RCEP. The areas of PALU which will be impacted by the Project will be developed for a creek diversion channel and a road/powerline realignment. These items are likely to remain <i>in situ</i> after mining has ceased. However the development which remains (realigned road) may be accessed post mining to assist the establishment of new adjoining areas for a PALU.	
		Figure 2 shows regional impacts on PALU from the Project have been assessed for significance using the cropping spatial data from the QLUMP spatial system. 17,436 ha of cropping has been identified within a 20km radius of the RCEP project area. Hence on the basis of this data, the RCEP will impact approximately 0.07% of potential PALU within a 20km radius of the RCEP.	

The activity will not result in a material impact on the region because of the activity's impact on the use of land in the priority agricultural area for 1 or more priority agricultural land uses.
Response
Figure 3 identifies the regional extent of potential cropping (relative to the Project) based on government land use mapping. The EIS assessments show that indirect impacts to the areas beyond the Project are not anticipated.
Therefore, there is no material impact on the region because of the RCEP's impact on the identified PALU. At scale, any mitigation would be not have any detrimental impact on PALU in the region, and any mitigation would be uneconomic/impracticable.
Further, the 11.58 ha PAA impact which Glencore has identified as PALU is fully contained within the 49.90 ha of SCA, which would be impacted by the project, and which RCEP anticipates will be subject to a mitigation payment made pursuant to provisions of the RPI Act for impact on SCA.
Post-mining, the Applicant will otherwise rehabilitate the subject land such that it is fit for pastoral uses.
As discussed in response to criteria (e) below, the potential impacts of the Project at a regional scale have been assessed as part of the EIS process. Those assessments have shown the RCEP is unlikely to have regional effects on air quality, groundwater, surface water and existing infrastructure.
Critically, DEHP's Assessment Report for the EIS determined that 'Significant changes in land use outside the site as a result of the project area are not anticipated'. Accordingly, the Applicant does not believe that the activity will result in any off-site impacts on the future use of areas in the region for PALU.
This criteria is satisfied. To date, where Glencore and its Joint Venture Partners hold the land to which the RCEP relates, care has been given to effect arrangements which allow current grazing uses to be ongoing until mining activities are ready to commence. During operation, areas of land will, for safety purposes, be restricted from ongoing grazing while being mined. The RCEP would however not impact on any infrastructure essential to the operation of a PALU. Conversely, once established, the RCEP would provide infrastructure off the lease area which may be of benefit to the potential future use of the area as PALU, in particular the realigned Springwood Road. The Queensland Agricultural Land Audit for Central Queensland identified the potential of additional irrigation development and infrastructure provision as key recommendations for the region. Regionally, the potential impacts of the project have been considered, primarily through the EIS process. The EIS

PAA Required Outcome 2	The activity will not result in a material impact on the region because of the activity's impact on the use of land in the priority agricultural area for 1 or more priority agricultural land uses.		
Prescribed Solution	Response		
	vibration, ecology, social and economic. Impact assessments were completed and the residual risk considered once management and mitigation control has been developed. Key outcomes with respect to PALU are considered below:		
	 Transport - The project will continue to utilize existing approved infrastructure for rail and shipping, which is contracted through other parties. The project will re-align a section of Springwood Road. The re-alignment will not impact future use of PALU in the region as it will provide a transport corridor and will be built in line with the expectations of CHRC including the provision for stock transport. The travelling stock route associated with the current Springwood Road will also be realigned to the new road location. The final design for this realignment is now complete and has been undertaken in consultation with CHRC and the DNRM stock route officer. 		
	 Traffic generation has also been considered with a road impact assessment completed. A Road User Management Plan has been developed and approved by DTMR to determine the safety measures that may need to be in place during construction and operation. Traffic volumes will not impact the use of PALU in the region. 		
	• Land - Impact assessment with regard to land and land use has been included in other sections of this RIDA. Critically, DEHP's Assessment Report for the EIS determined that 'Significant changes in land use outside the site as a result of the project area are not anticipated'.		
	• Surface Water- Water quality release limits in the (approved) amended Rolleston Coal Mine environmental authority are consistent with the conditions allowed for under the existing operations. Mine affected water discharges are limited to set rates to ensure receiving waters' environmental values are protected, and are only permitted during times of significant flow in Meteor and Bootes Creek. This ensures acute effects are avoided and the natural, longer term qualities of receiving waters are managed and maintained. The quality (and quantity) of discharge water would also be maintained through an extension of the current water management systems operating at the existing mine. These systems have been implemented since 2005 and are proven to be effective.		
	After the completion of mining, final pit voids would remain. An assessment of the quantity and quality of water that may potentially accumulate in voids, post mining operations has been completed. To minimise the catchment areas to the voids and maximise clean water drainage to the receiving environment, mitigation measures such as diversions are proposed. There is expected to be significant storage available		

PAA Required Outcome 2	The activity will not result in a material impact on the region because of the activity's impact on the use of land in the priority agricultural area for 1 or more priority agricultural land uses. Response		
Prescribed Solution			
	within the final voids (the equilibrium storage level is expected to occur 100 years after the completion of mining), as such no overflows from the storages are predicted. As water contained within the voids is not expected to interact with surface water, the long term potential impact on the surface water environment is minimised. The water quality modelling also shows that the salinity of the voids is suitable as a stock water source post closure.		
	 Groundwater- Detailed assessment included field investigations and numerical modeling were undertaken to determine the potential impacts of the Project. The detailed assessment considered: Groundwater levels and depressurisation. Mine operation and pit seepage. Subsequent impacts upon landholder bores. Hydrological linkage to surface water (including wetlands). Environmental values such as groundwater dependent ecosystems. 		
	A total of 66 landholder bores are located on properties owned by Glencore and its Joint Venture Partners, with 37 bores predicted to be impacted by groundwater depressurisation at the end of the Project. A total of 19 landholder bores are located on properties not owned by Glencore and its Joint Venture Partners, these being "Bottle Tree Downs", and the Albinia National Park, with 3 bores predicted to be impacted by groundwater depressurisation at the end of the Project. Landholder bore mitigation strategies (including make good arrangements) have been or are close to finalised with a number of adjacent landholders, based on each separate circumstance, determined by the level of impact upon the bore's capacity and the suitability of the required mitigation. Mitigation measures include upgrading pumps, deepening bores and redrilling of bores as required. Though the bores used by the NPRS for firefighting are predicted to be impacted by the project, no environmental values within the National Park are predicted to be impacted by the project.		
	 Air - The air quality impact assessment concluded that there will be no exceedances outside properties owned by Glencore and its Joint Venture Partners. Studies determined that there is a low risk of any impacts associated with dust deposition on foliage arising. Noise and Vibration- Impacts associated with noise and vibration have been assessed as limited to land owned by Glencore and its Joint Venture Partners. 		
	The RCEP will therefore not constrain, restrict or prevent the ongoing use of an area in the region for one or more PALU's, outside the 11.58 ha which has been acknowledged to be directly impacted by the RCEP (see the		

·		The activity will not result in a material impact on the region because of the activity's impact on the use of land in the priority agricultural area for 1 or more priority agricultural land uses. Response	
		In addition, existing infrastructure has been avoided, the overland flow characteristics relevant to PALU will not be changed, and weed and pest management practices can continue. The Applicant does not consider that the application will in any way constrain, restrict or prevent the ongoing use of an area in the region for PALU, outside of the direct footprint of impact.	
1 4	Subsection (3) applies if the activity is to be carried out in a priority agricultural area that includes a regionally significant water source and—	The RCEP is not proposed to be carried out in a priority agricultural area that includes a regionally significant water source and will not produce associated water. Accordingly, assessment against the criteria in subsection (3) is not required.	
(a)	if the activity is to be carried out under an authority to prospect or a petroleum lease under the Petroleum and Gas (Production and Safety) Act 2004—the activity is likely to produce CSG water; or		
(b)	if the activity is to be carried out under a mineral development licence or a mining lease under the MRA—the activity is likely to produce associated water.		
I	The application must demonstrate the applicant has in place a strategy or plan for managing the CSG water or associated water that provides for the net replenishment of the regionally		

-	The activity will not result in a material impact on the region because of the activity's impact on the use of land in the priority agricultural area for 1 or more priority agricultural land uses.
Prescribed Solution	Response
significant water source.	
(4) For subsection (3), net replenishment of a regionally significant water source is the replacement to the water source, whether directly or indirectly, of all water that is no longer available for a priority agricultural land use in a priority agricultural area because carrying out a resource activity in the area produces CSG water or associated water.	
property on which the activity is to be	Glencore and its Joint Venture Partners own each parcel of land on which the RCEP is to be carried out. As a result, it is not necessary for the RCEP to be assessed against the elements of Required Outcome 1 for the PAA for each parcel (RPI Reg Schedule 2,Part 2, Subsections 5(5) and 5(6)).
(6) The application must demonstrate the matters listed in this schedule, section 3 for a prescribed solution for required outcome 1 for the property.	
(7) In this section— associated water means underground water taken or interfered with, if the taking or interference happens during the course of, or results from, the carrying out of an activity authorised under a mineral development licence or	n/a

-	The activity will not result in a material impact on the region because of the activity's impact on the use of land in the priority agricultural area for 1 or more priority agricultural land uses.
Prescribed Solution	Response
mining lease. CSG water (see the Petroleum and Gas (Production and Safety) Act 2004, schedule 2. overland flow water see the Water Act 2000, schedule 4. Underground water see the Water Act 2000, schedule 4.)	

Assessment Table 2 – Strategic Cropping Area (RO 2)

SCA	Required Outcome 2	The activity will not result in a material impact on strategic cropping land on the property SCL
Presc	cribed solution	Response
	pplication demonstrates all of the wing:	Glencore and its Joint Venture partners own each parcel of land the subject of the RCEP.
(a)	if the applicant is not the owner of the land and has not entered into a voluntary agreement with the owner—the applicant has taken all reasonable steps to consult and negotiate with the owner of the land about the expected impact of carrying out the activity on strategic cropping land;	
(b)	the activity cannot be carried out on land that is not strategic cropping land, including, for example, land elsewhere on the property (SCL), on adjacent land or at another nearby location;	This criteria is satisfied. The RCEP, as a brownfield expansion of an existing operation, is constrained by its nature in needing to effectively 'co-locate' with the existing operation. However, this also brings benefit in minimizing the overall disturbance area required because of the utilisation of existing of infrastructure and associated facilities. Mining activities are also constrained in their operation by the location of the resource deposit and economically feasible methods for its extraction. The RCEP has been designed to economically extract an identified coal reserve and prevent resource sterilisation. The specific aspects of the activity which will directly impact on land in the SCA as shown in SCL Trigger Mapping (as at March 2015) are:

SCA Required Outcome 2	The activity	The activity will not result in a material impact on strategic cropping land on the property SCL		
Prescribed solution	Response	Response		
	Ide	entifier (Figure 8)	Description	Area (ha)
		А	Open Cut Mining Pit	32.57
		В	Sandy Creek diversion channel	5.11
		С	Sandy Creek diversion channel	2.05
		D	Springwood Road and power infrastructure realignment	4.37
		E	Springwood Road and power infrastructure realignment	5.80
			Tota	l 49.90 ha
	close to the u location is co and a stable public access standards fo	The location of these items is also constrained by a number of factors. The Sandy Creek diversion must be close to the upstream limit of mine operations so it can effectively divert all flows around the mine. Also, its location is constrained by the need to have appropriate stream gradient, a stable exit point from Sandy Creek, and a stable discharge point to Meteor Creek. The Springwood Road realignment is required to maintain public access to areas to the south-west of the RCEP area. The route selected must adhere to recognised standards for safety and flood immunity as well as minimising impacts on overland flows. The proponent has deleted the proposed water storage dam from Lot 3 on DSN 590, reducing the impact on		
	1. 0	Road must be reali	gned to facilitate development of the mine, and to giving a signed to account for all user needs while taking acco	

curves and susceptibility to flooding. Consideration has been given to reduce the likely permanent impact of

application. However, while the balance area will not be disturbed by mining activities, the Department has advised that it does not consider the land is available for cropping; and is to be included in the impact area.

land within the proposed corridor. Using off design drawings, the corridor impact has been able to be reduced, with the alignment taking up 15-30 metres, and not 60 metres as allowed for in the original

SCA	Required Outcome 2	The activity will not result in a material impact on strategic cropping land on the property SCL
Prescribed solution		Response
		RJV has included the full 60 metre corridor as being impacted.
		Consequently, the permanent loss of SCA will be 49.90 ha.
(c)	the construction and operation footprint of the activity on strategic cropping land on the property (SCL) is minimised to the greatest extent	This criteria is satisfied. The location for the RCEP is determined by the presence of coal seams that are amenable for economic extraction in the vicinity of the existing Rolleston Coal Mine. The RCEP involves an extension to an existing open cut in the Rolleston Coal Measures.
	possible;	Underground mining was considered in planning for the RCEP and was not considered viable as approximately 90% of the coal resource within the Project Footprint occur above a depth of 100 m. The depth of the resources and the number of seams targeted means that underground mining is not a viable option for the RCEP. Greater capital would also be required to operate the expansion as an underground operation given that the machinery currently used at the existing mine, which is suited to open cut mining methods, could not be used. In addition, open cut mining methods are more efficient in terms of resource utilisation. The disturbance footprint for the RCEP has been minimised to the greatest extent possible while allowing for safe and feasible mining of the identified coal seams.
		Every effort has been made to minimise the disturbance footprint of the RCEP on areas of SCA. The RCEP's Water Management System for the Project has been subject to design considerations since 2011 and has been developed to avoid areas of environmental significance, including SCA (SCL as it was known at the time), in the first instance. Where avoidance was not possible, mitigation and management measures were developed.
		The water infrastructure originally proposed for the project that impacted on SCA involved the development of a water storage dam on Lot 3 DSN 590 and a diversion of a portion of the Sandy Creek. Following further assessment over 2016, the dam has been deleted from the Mine Plan, reducing the SC impact to 49.90 ha.
		Chapter 2 of the RCEP's EIS includes project justification and design considerations in Section 2.2.2.1 for the Water Management and Supply associated with the project and section 2.2.4 describes locality alternatives. This includes justification for the location of water infrastructure and why certain locations were chosen.
		Chapter 9 of the EIS and Appendix G-1 Surface Water Assessment contain the technical detail around the design justification for the location.
		In summary, the key reasons associated with the decision to locate this infrastructure in this area (based on

SCA	Required Outcome 2	The activity will not result in a material impact on strategic cropping land on the property SCL	
Preso	cribed solution	Response	
		detailed hydrological work) included:	
		 minimising the number of creek diversions required for the project reducing the impact of the project on existing creek systems during modelled flood events (related to existing topography) ensuring an appropriate water management system for the project, including minimising the spatial extent of land required to be impacted by additional water management infrastructure. Efficiently linking infrastructure to the existing water management system in place in ML70307 with environmental, geological and topographical constraints. 	
		The EIS and associated submissions report (which addressed all comments raised by submitters on the EIS including those from government agencies) was assessed and recommended to proceed by DEHP subject to public notification processes under the <i>Mineral Resources Act 1989</i> and <i>Environmental Protection Act 1994</i> .	
		The road realignment has been the subject of extensive assessment, and the option with the least proposed impact on SCA has been selected. The preferred alignment minimises the overall impacts on land used for a SCA while still allowing for safe and efficient access and travel for road users.	
		It should be noted that EIS had 2 options in relation to the Springwood Road re-alignment; since completion of the EIS, Option 1 has been chosen as the final preferred route in consultation with stakeholders. The Project footprint in the RCEP RPI application accords with the footprint based on Option 1, following further detailed design post-EIS.	
(d)	if the activity will have a permanent impact on strategic cropping land on a property (SCL)—no more than 2% of the strategic cropping land on the property (SCL) will be impacted.	This criteria is satisfied.	
		The RCEP will have an impact on 0.53% of SCL on the relevant property (SCL), as shown in Figure 5.	
		The Applicant anticipates that a mitigation measure will be a condition in the RIDA where impacts to SCA cannot be avoided, as per Part 4 of the RPI Act. Mitigation measures may include either a payment to the mitigation fund, the entering into a mitigation deed, or a combination of both. The Applicant is prepared to accept a condition to make a payment to the mitigation fund under provisions of s62(1)(a) of the RPI Act (on a pro rata basis of 38.32 ha, being the full SCA impact of 49.90 ha, less the 11.58 ha to be mitigated for PALU).	

Assessment Table 3 – Strategic Cropping Area (RO 3)

SCA	Required Outcome 3	The activity will not result in a material impact on strategic cropping land in an area in the strategic cropping area.
Presc	cribed solution	Response
	example, land elsewhere on the	This criteria is satisfied. The RCEP, as a brownfield expansion of an existing operation, is constrained by its nature in needing to effectively 'co-locate' with the existing operation. However, this also brings benefit in minimizing the overall disturbance area required because of the utilisation of existing of infrastructure and associated facilities. Mining activities are also constrained in their operation by the location of the resource deposit and economically feasible methods for its extraction. The RCEP has been designed to economically extract an identified coal reserve and prevent resource sterilisation.
(b)	if there is a regional plan for the area in which the activity is to be carried out – the activity will contribute to the regional outcomes, and be consistent with the regional policies, stated in the regional plan;	This criteria is satisfied. The regional policies in the CQ Regional Plan aim to protect PALUs while supporting co-existence opportunities for the resources sector, and provide certainty for the future of towns. Glencore believes that the RCEP is consistent with these policies. There are no regional outcomes in the CQ Regional Plan specific to the SCA (although there can be overlaps between PALUs and the SCA). As outlined in the application (see assessment against PAA RO 2, Item 1(a)), the RCEP will contribute to the regional outcome that 'agriculture and resource industries within the Central Queensland Region continue to grow with certainty and investor confidence'. This highlights the reasons the RCEP needs to proceed – namely to allow the development of resources in the area economically and with investor confidence. Failure to undertake the RCEP would ultimately lead to sterilisation of an identified resource in the area, contrary to the best interests of the State and the Region. In addition, if the RCEP does not proceed, ongoing operations at the Rolleston Coal Mine will be limited with an early closure (the RCEP extends mining by 30 years). This will be damaging to the regional economy which supplies many of the goods and services for the current mining operations and its staff. The early closure of the existing operations would also likely lead to a decline in prosperity of the region as a

SCA	Required Outcome 3	The activity will not result in a material impact on strategic cropping land in an area in the strategic cropping area.
Preso	cribed solution	Response
		number of local employees would lose their jobs. The Applicant's ongoing operations at its existing and approved mine are fundamental to the growth and vitality of the Rolleston and Springsure townships. As the existing operator of the Rolleston Coal Mine, Glencore, in its various undertakings, has already made substantial contributions to these townships including infrastructure investment and local community grants; for example the recent establishment of five \$10,000 scholarships and a further \$10,000 in student prizes at the Emerald Agricultural College. The RCEP will continue this pattern of investment for the benefit of all residents.
		To the greatest extent possible, the RCEP has been designed to avoid and protect PALUs and SCL within the region (as discussed in the application), with the recent update to the Mine Plan from the original application figure of 115.29 ha to 49.90 ha. The RCEP will maximise opportunities for the co-existence of resource and agricultural land uses, including by the establishment of mutually beneficial infrastructure.
(c)	the construction and operation	This criteria is satisfied.
	footprint of the activity on strategic cropping land is minimised to the greatest extent possible;	The location for the RCEP is determined by the presence of coal seams that are amenable for economic extraction in the vicinity of the existing Rolleston Coal Mine. The RCEP involves an extension to an existing open cut in the Rolleston Coal Measures. Underground mining was considered in planning for the RCEP and was not considered viable as approximately 90% of the coal resource within the Project Footprint occur above a depth of 100 m. The depth of the resources and the number of seams targeted means that underground mining is not a viable option for the RCEP. Greater capital would also be required to operate the expansion as an underground operation given that the machinery currently used at the existing mine, which is suited to open cut mining methods, could not be used. In addition, open cut mining methods are more efficient in terms of resource utilisation. The disturbance footprint for the RCEP has been minimised to the greatest extent possible while allowing for safe and feasible mining of the identified coal seams.
		Every effort has been made to minimise the disturbance footprint of the RCEP on areas of SCA. Through detailed design of the Project, the area of SCA impact has been significantly reduced.
		Every effort has been made to minimise the disturbance footprint of the RCEP on areas of SCA. The RCEP's Water Management System for the Project has been subject to design considerations since 2011 and has been

SCA Required Outcome 3	The activity will not result in a material impact on strategic cropping land in an area in the strategic cropping area.
Prescribed solution	Response
	developed to avoid areas of environmental significance, including SCA (SCL as it was known at the time), in the first instance. Where avoidance was not possible, mitigation and management measures were developed.
	The water infrastructure proposed for the project that impact on SCA originally involved the development of a water storage dam on Lot 3 on DSN 590 and a diversion of a portion of the Sandy Creek. Detailed design has been completed for both aspects which have considered both environmental constraints as well as technical and economic aspects. Refinements to the RCEP Mine Plan have facilitated a further reduction on impact to SCA, with the deletion of the water storage on Lot 3 on DSN 590.
	Chapter 2 of the RCEP's EIS includes project justification and design considerations in Section 2.2.2.1 for the Water Management and Supply associated with the project and section 2.2.4 describes locality alternatives. This includes justification for the location of water infrastructure and why certain locations were chosen.
	Chapter 9 of the EIS and Appendix G-1 Surface Water Assessment contain the technical detail around the design justification for the location.
	In summary, the key reasons associated with the decision to locate this infrastructure in this area (based on detailed hydrological work) included:
	 minimising the number of creek diversions required for the project reducing the impact of the project on existing creek systems during modelled flood events (related to existing topography) ensuring an appropriate water management system for the project, including minimising the spatial
	extent of land required to be impacted by additional water management infrastructure. • Efficiently linking infrastructure to the existing water management system in place in ML70307 with environmental, geological and topographical constraints.
	The EIS and associated submissions report (which addressed all comments raised by submitters on the EIS including those from government agencies) was assessed and recommended to proceed by DEHP subject to public notification processes under the <i>Mineral Resources Act 1989</i> and <i>Environmental Protection Act 1994</i> .
	The road realignment has been the subject of extensive assessment, and the option with the least proposed impact on SCA has been selected. The preferred alignment minimises the overall impacts on land used for a

•	The activity will not result in a material impact on strategic cropping land in an area in the strategic cropping area.
Prescribed solution	Response
	SCA while still allowing for safe and efficient access and travel for road users. It should be noted that EIS had 2 options in relation to the Springwood Road re-alignment; since completion of the EIS, Option 1 has been chosen as the final preferred route in consultation with stakeholders. The Project footprint in the RCEP RPI application accords with the footprint based on Option 1, following further detailed design post-EIS.
permanent impact on the strategic cropping land in the area; or (ii) the mitigation measures	This criteria is satisfied. The RCEP will have a permanent impact on 0.53% of SCA on the relevant property, as outlined in the application. This is not considered a material impact under the RPI Regulation. The Applicant anticipates that a mitigation measure will be a condition in the RIDA where impacts to SCA cannot be avoided, as per Part 4 of the RPI Act. Mitigation measures may include either a payment to the mitigation fund, the entering into a mitigation deed, or a combination of both. The Applicant is prepared to accept a condition to make a payment to the mitigation fund under provisions of s62(1)(a) of the RPI Act (on a pro rata basis of 38.32 ha, being the full SCA impact of 49.90 ha, less the 11.58 ha to be mitigated for PALU, as the area of PALU is fully incorporated within the impacted SCA).
(2) Subsection (3) applies for each property (SCL) on which the activity is to be carried out if the applicant is not the owner of the land and has not entered into a voluntary agreement with the owner.	The RCEP will be carried out on a single property (SCL) (being lots owned by the same person and forming a single discrete area) owned by Glencore. Accordingly, assessment against subsection (3) is not required.
(3) The application must demonstrate the matters listed in this schedule, section 11 for a prescribed solution for required outcome 2 for the property (SCL).	Pursuant to subsection (2) above, assessment against subsection (3) is not required.