

ASSESSMENT REPORT

INTEGRA MINING COMPLEX Biodiversity Offset Strategy Modification (MP 08_0101 MOD 4 & MP 08_0102 MOD 4)

1 BACKGROUND

Integra Coal Operations Pty Ltd (Integra), a subsidiary of Vale Australia, operates the Integra Mining Complex (the Complex), located approximately 10 kilometres (km) northwest of Singleton in the Hunter Valley (see Figure 1). The Complex is located within the Singleton Local Government Area (LGA).

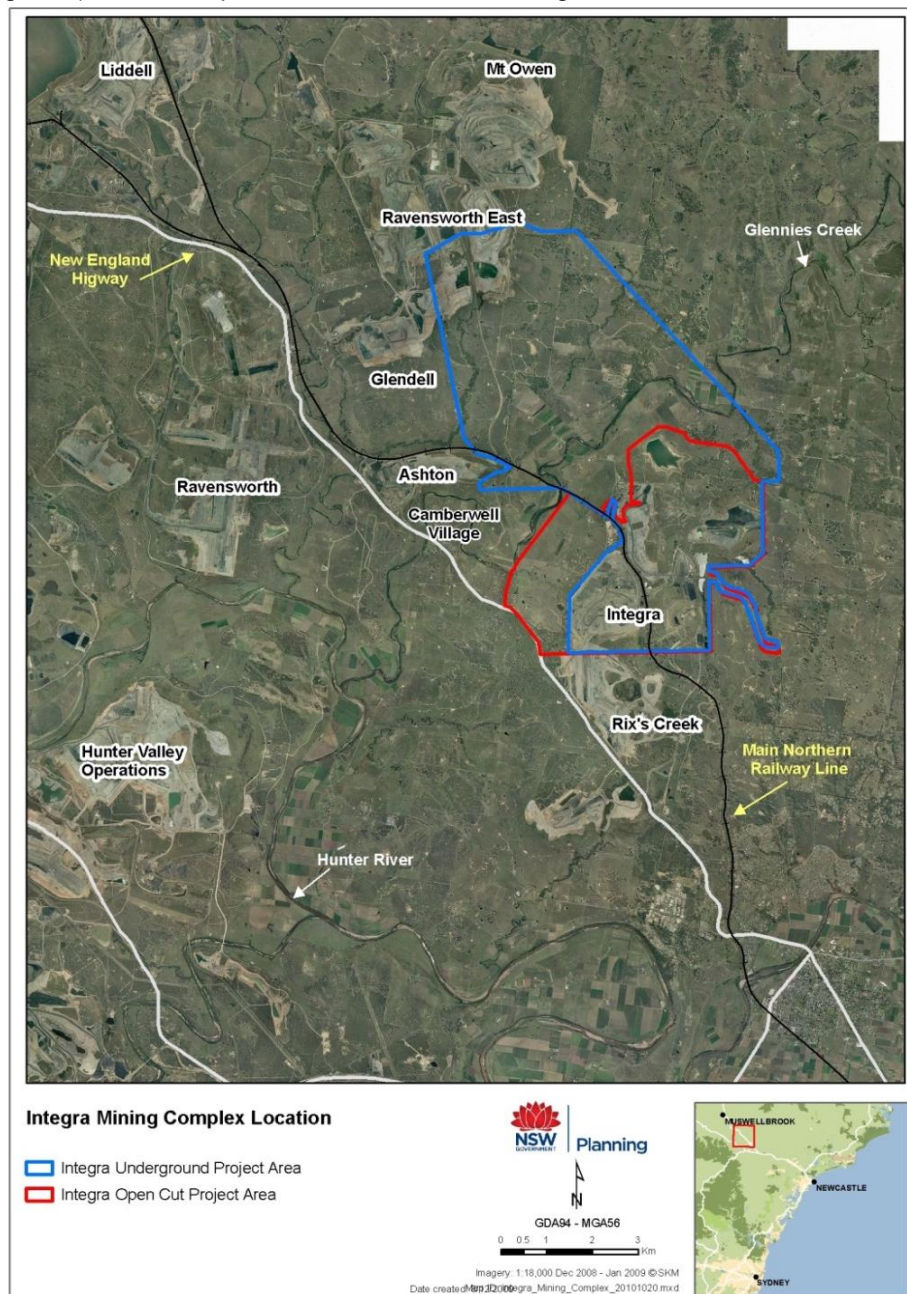


Figure 1: Regional Context

The Complex comprises 3 separate mining areas, including the former:

- Camberwell open cut mine;
- Glennies Creek open cut mine (now known as the North Open Cut); and
- Glennies Creek underground mine.

The Complex is regulated by a single consolidated Ministerial project approval granted on 26 November 2010 which is currently held by Integra. The project approval governs both the Integra Underground Coal Project (MP 08_0101) and the Integra Open Cut Project (MP 08_0102).

The current project approval consolidated and replaced numerous development consents and project approvals regulating underground and open cut mining operations since 1990, including previous approvals for the Camberwell mine (DA 86/2889), Glennies Creek underground mine (MP 06_0057) and the Glennies Creek open cut project (MP 06_0073).

The current project approval has been modified three times since 2010. These modifications allowed:

- an extension to an overburden emplacement and associated infrastructure relocation;
- removal of the requirement to install an overland conveyor (ie continued truck haulage) for transportation of run-of-mine coal from the underground surface facilities to the coal handling and preparation plant; and
- an extension of time to secure the biodiversity offset areas for the Complex, to the end of September 2014.

Operations at the Complex have been under care and maintenance since July 2014 for underground operations and since August 2014 for open cut operations.

Biodiversity Offset Strategy

The biodiversity offsetting requirements for the Complex were first set out in the 2008 approval for the Glennies Creek open cut project (MP 06_0073). These requirements were subsumed into and expanded in the 2010 consolidated project approval. The approved biodiversity offset areas are shown on Figure 2 and include the:

- Northern Biodiversity Offset Area;
- Southern Biodiversity Offset Area;
- Western Biodiversity Offset Area;
- Supplementary Biodiversity Offset Area;
- Bridgman Biodiversity Offset Area; and
- Martins Creek Biodiversity Offset Area, which was added to the Biodiversity Offset Strategy in June 2012 in accordance with the requirements in condition 42 of Schedule 3 of the project approval.

Subsequent investigations into the biodiversity offset areas by Integra have shown that some of the areas – namely the Northern, Southern, Western and Supplementary Biodiversity Offset Areas – are underlain by substantial coal reserves. To address this potential land use conflict, Integra has sought to postpone the provision of long term security for the existing offsets to allow it to carry out further investigations to determine whether the areas remain appropriate as a biodiversity offset, or whether an alternate strategy is more appropriate.

In this regard, condition 43 of Schedule 3 of the project approval originally required Integra to provide long term security of the biodiversity offset areas by the end of December 2011. In December 2011, Integra sought¹ and subsequently gained approval for a 9 month extension to provide time to complete these investigations (ie to the end of September 2012).

Integra completed this additional work in 2012, confirming that the offset areas overlies a significant coal resource comprising some 43 million tonnes of thermal and coking coal with a value at that time of approximately \$6.2 billion. Since then, Integra has been working to identify a revised offset strategy for the Complex that addresses the conflict with potential extraction of valuable coal resources whilst continuing to satisfy its original offset obligations. Whilst these investigations have been ongoing, Integra has sought and gained approval for two further extensions of the timeframe prescribed in condition 43 to provide for the long term security for the offset strategy – firstly to March 2013 and secondly to September 2014. In early 2014, Integra identified a revised Biodiversity Offset Strategy for the Complex, and then sought to modify the project approval to facilitate this revised offset strategy.

¹ Via MOD 1 to MP 08_0101 and MP 08_0102

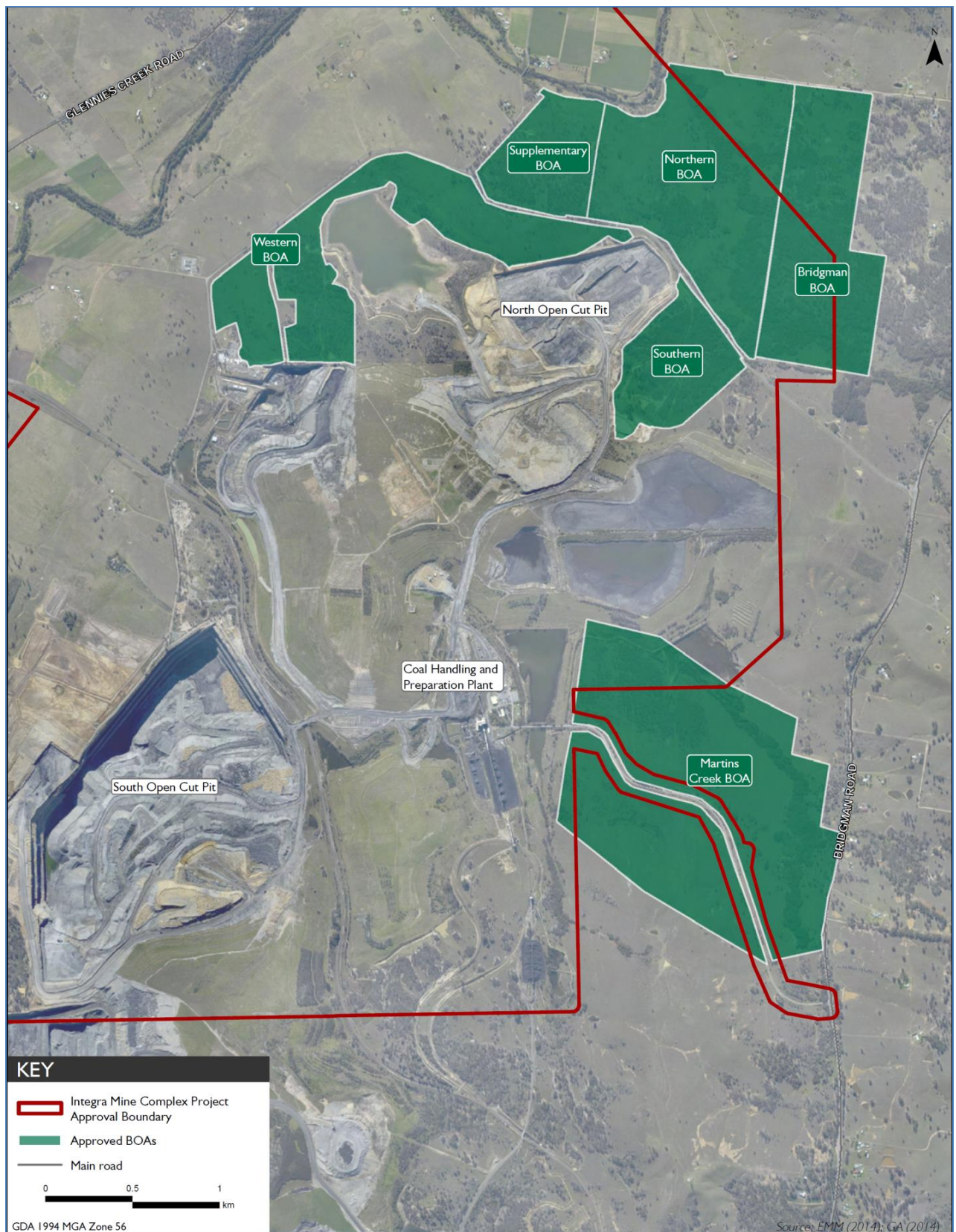


Figure 2: Approved Biodiversity Offset Areas

2 PROPOSED MODIFICATION

In May 2014, Integra applied to modify the consolidated project approval for the Integra underground and open cut projects (MP 08_0101 and MP 08_0102 respectively) under section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The proposed modification involves changing the composition of the approved Biodiversity Offset Strategy for the Complex, specifically to:

- excise the Western and Supplementary Biodiversity Offset Areas;
- reduce the size of the Northern and Southern Biodiversity Offset Areas and modify the boundaries of the Martins Creek Biodiversity Offset Area; and
- include two new biodiversity offset areas (collectively referred to as the Appletree Flat Biodiversity Offset Area), located approximately 30 km to the west of the Complex. Both areas are currently private inholdings within the boundaries of the Wollemi National Park.

The locations of the revised biodiversity offset areas are shown on Figures 3, 4 and 5. Full details of the proposed modification are included in the Environmental Assessment (EA) which supports the modification application (see **Appendix A**).

In late August 2015, it was announced that Vale Australia had agreed to sell the Complex to Glencore Coal Assets Australia (Glencore) and the Bloomfield Group. However, as at the date of this report, ownership of the Complex remained with Vale (ie Integra) and thus the right to act on the project approval (including with respect to modifying the approval) continues to rest with Integra.

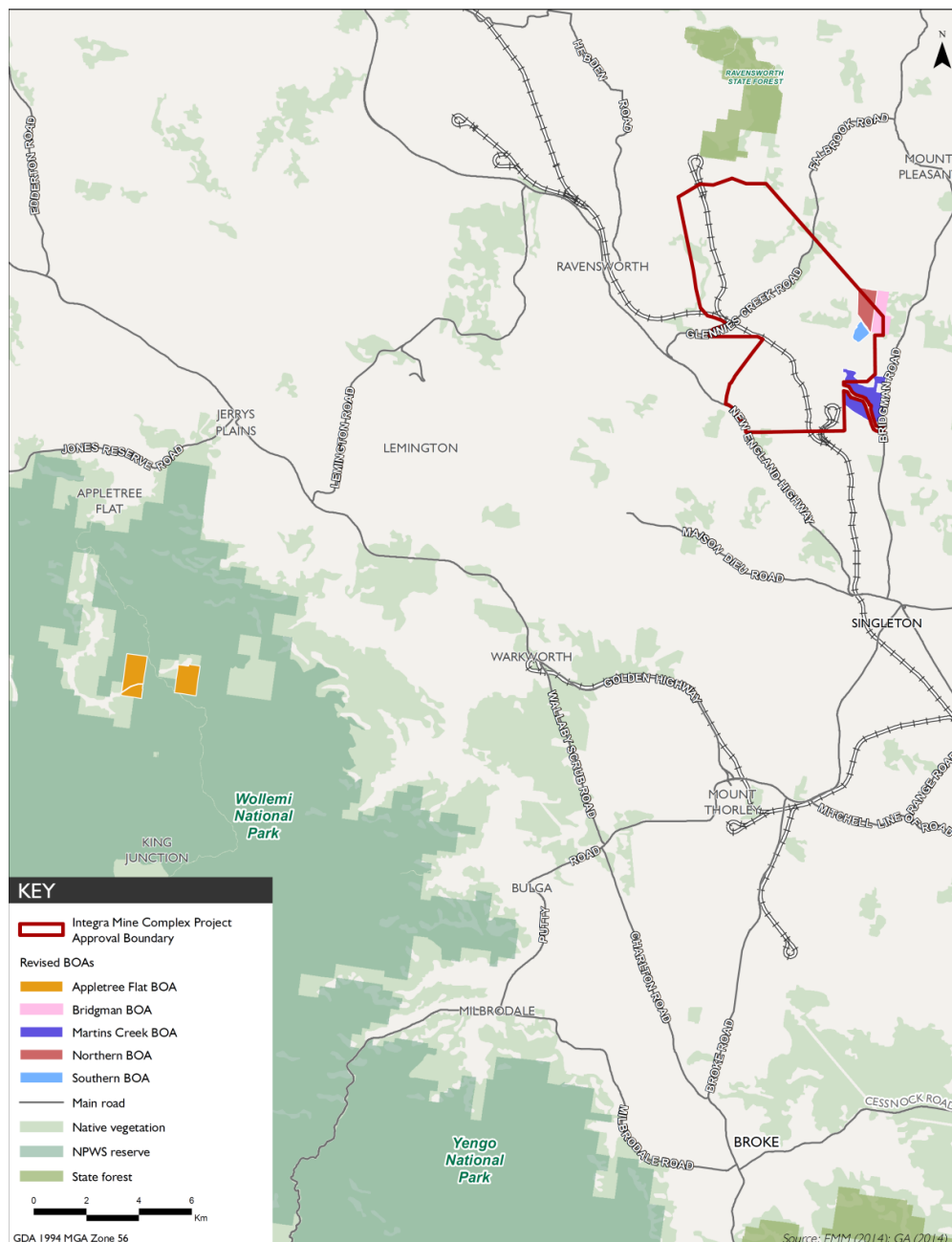


Figure 3: Revised Biodiversity Offset Areas (Regional View)

3 STATUTORY CONTEXT

Section 75W

The Integra underground and open cut projects were originally approved under Part 3A of the EP&A Act. Although Part 3A was repealed on 1 October 2011, the projects remain 'transitional Part 3A projects' under Schedule 6A of the EP&A Act and hence any modifications to the project approval are to be made under the former section 75W of the EP&A Act.

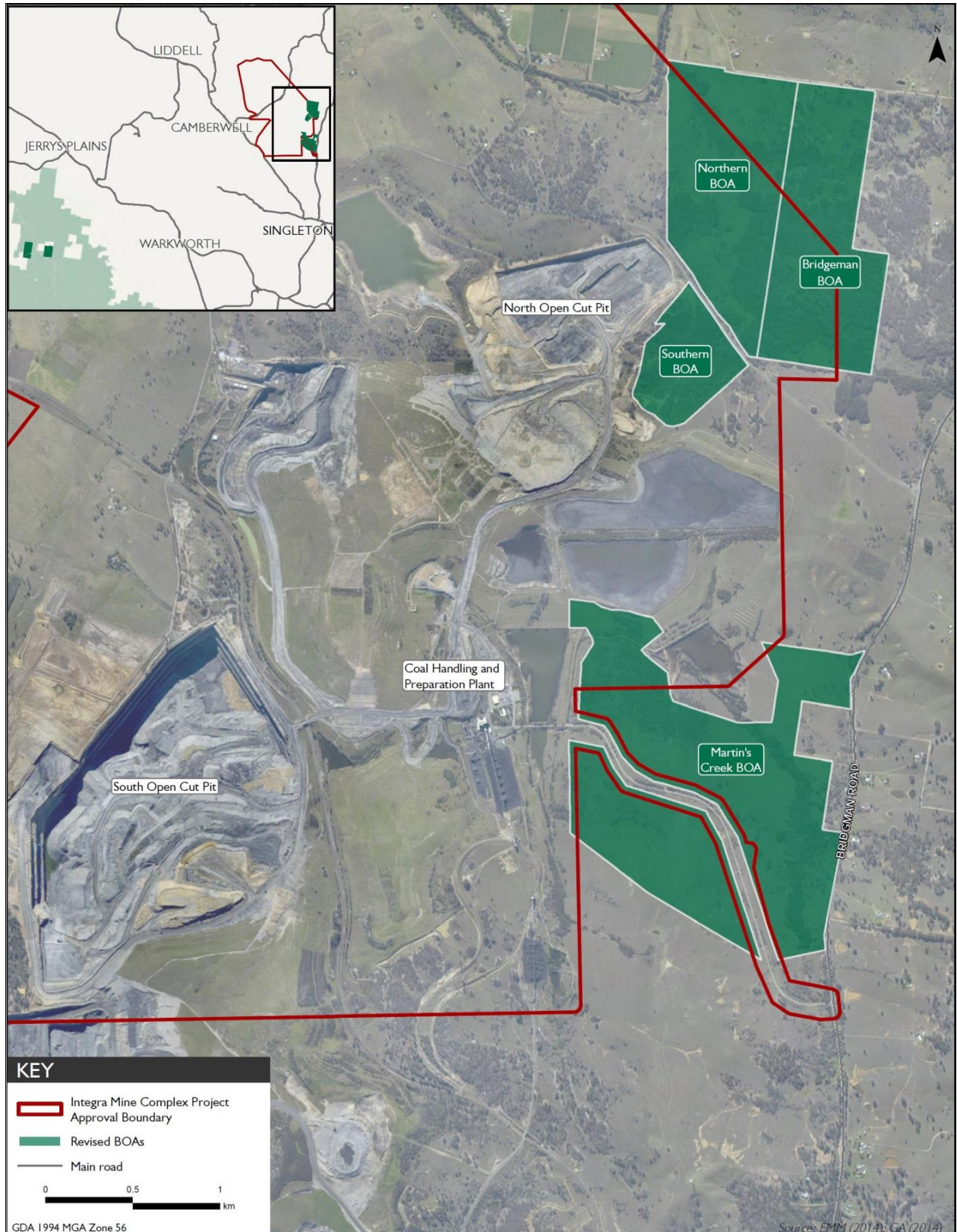


Figure 4: Revised Biodiversity Offset Areas (On-Site)

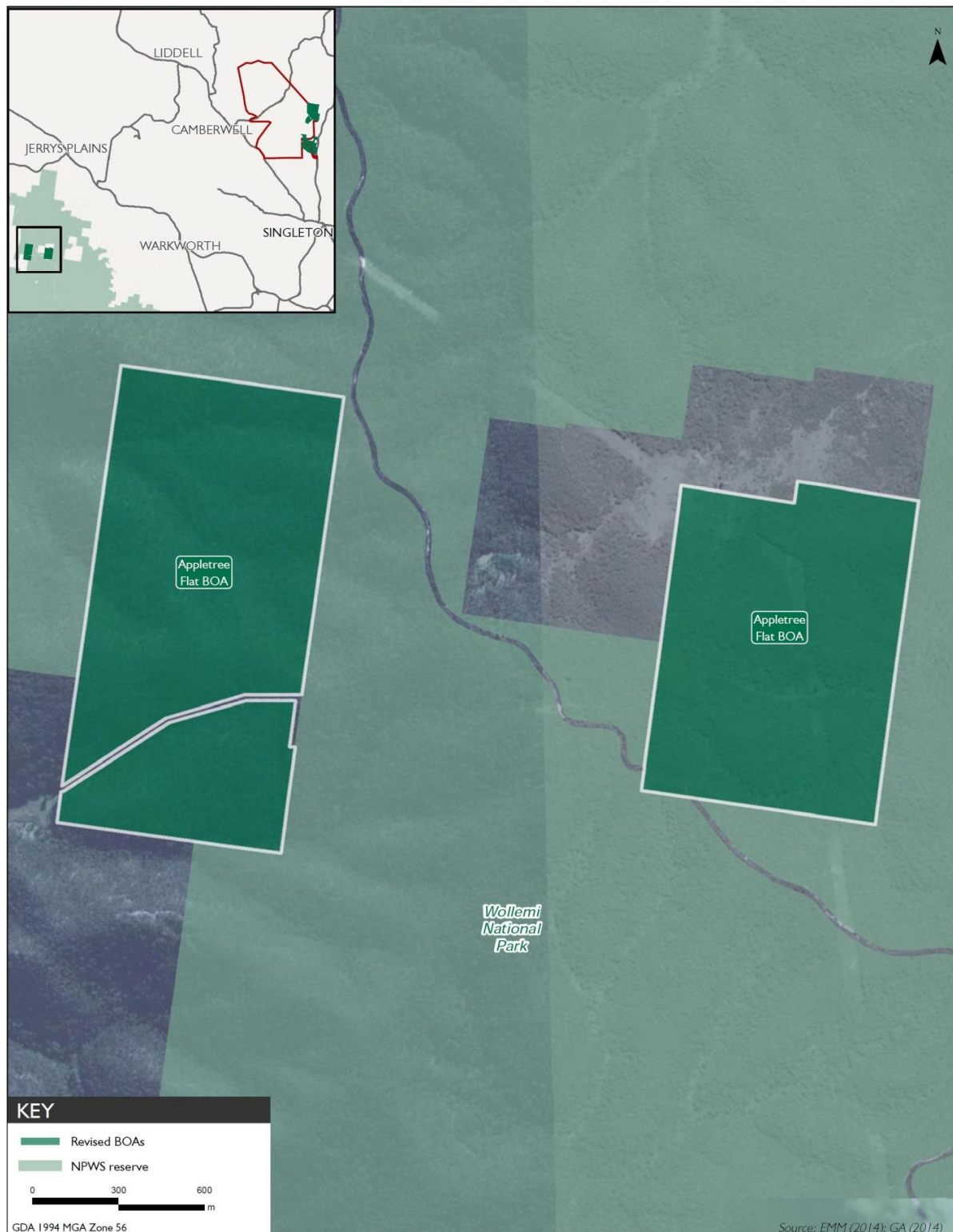


Figure 5: Appletree Flat Biodiversity Offset Area

The proposed modification does not involve any significant changes to the Complex (such as project or mining areas, mining methodology and production rates). The Department is satisfied that it can be characterised as a modification to the existing project approvals and can therefore be assessed and determined under Section 75W of the EP&A Act.

Approval Authority

Under section 75W of the EP&A Act, the Minister for Planning is the approval authority for this modification application. However, under the Minister's delegation dated 14 September 2011, the Planning Assessment Commission must determine the application as there have been more than 25 public submissions on the proposal that are in the nature of an objection.

Environmental Planning Instruments

The Department has considered the relevant environmental planning instruments in its assessment and is satisfied that none of these instruments substantially govern the carrying out of the proposed modification.

4 CONSULTATION

After accepting Integra's application and associated EA for the proposed modification, the Department exhibited the documents between Friday 23 May 2014 and Monday 9 June 2014:

- on the Department's website (www.planning.nsw.gov.au);
- at the Department's Information Centre; and
- at Singleton Shire Council's administrative centre.

The exhibition was advertised in the Singleton Argus and relevant State government authorities were notified of the exhibition by email.

In response to the public exhibition, the Department received a total of 114 submissions, including:

- 3 from public authorities;
- 9 from special interest groups; and
- 102 from community members (of which 84 were on-line *pro forma* submissions).

A full copy of the submissions received in response to the public exhibition is attached in **Appendix B**.

Response to Submissions (RTS)

In July 2014, Integra submitted a detailed response to issues raised in submissions (see **Appendix C**), which was made publicly available on the Department's website. A summary of the issues raised during the exhibition and in response to the RTS is provided below.

Public Authorities

The **Division of Resources and Energy** (DRE) within the Department of Industry raised no objections to the proposed modification.

The **Department of Primary Industries** provided a consolidated submission on behalf of **Fisheries NSW** and **DPI Water** and raised no objections to the proposed modification.

The **Office of Environment and Heritage** (OEH) did not object to the proposed modification but raised some concern about reliance on regeneration as a surrogate for remnant vegetation to meet the overall offset target for the *Narrow-leaved Ironbark-Spotted Gum-Grey Box Open Forest* community.

To address this issue, OEH recommended that Integra should be required to:

- update the Integra Mine Complex Biodiversity Management Plan to reflect the revised Biodiversity Offset Strategy;
- undertake active revegetation of the proposed revegetation areas (ie rather than passive management);
- undertake an independent audit of the biodiversity offset areas within 5 years to assess the status of revegetation works; and
- ensure the conservation bond reflects the revised Biodiversity Offset Strategy.

Community and Special Interest Groups

All but one of the submissions from the public and special interest groups objected to the proposed modification. As noted above, the majority of these objections were in the form of online *pro forma* submissions. A relatively small number of submissions were from individuals residing in the Singleton LGA, with the remaining submissions being from Sydney and Newcastle.

Special interest groups that made submissions on the proposed modification were:

- United Mineworkers Federation of Australia (a division of the Construction, Forestry, Mining and Energy Union) - supportive of the proposed modification;
- The Australia Institute;
- Lithgow Environment Group;
- Hunter Environment Lobby;
- Doctors for the Environment;

- Hunter Community Network;
- Nature Conservation Council;
- Ironstone Community Action Group Inc.; and
- Lock the Gate Alliance.

The key concerns raised in the submissions related to:

- protection of the *Central Hunter Ironbark-Spotted Gum-Grey Box Forest Endangered Ecological Community* (EEC);
- the offset value and suitability of the proposed Appletree Flat Biodiversity Offset Area; and
- the current status (ie care and maintenance) of the Complex.

The submissions also raised concerns regarding the potential loss of biodiversity values as a result of the modified on-site biodiversity offset areas and long term security for biodiversity offset areas.

These issues have been considered in the assessment below.

5 ASSESSMENT

In assessing the merits of the proposed modification, the Department has considered the:

- EA (see **Appendix A**), submissions (see **Appendix B**) and RTS (see **Appendix C**) for the proposed modification;
- relevant content of previous EAs for the development and current environmental management plans;
- current consolidated project approval for the Integra underground and open cut projects;
- provisions of relevant environmental planning instruments, policies and guidelines; and
- relevant provisions of the EP&A Act, including the objects of the Act.

Whilst no physical impacts would occur as a result of the proposed modification, the primary issue is whether the revised Biodiversity Offset Strategy adequately satisfies the offset requirements in the project approval that were established to offset the biodiversity impacts of the Complex. The Department's assessment of this issue is presented below.

5.1 Biodiversity Offset Strategy

The EA provides an assessment of the proposed revised Biodiversity Offset Strategy by way of comparison to the currently approved Biodiversity Offset Strategy, which was developed to offset the ecological impacts of the approved Complex on native vegetation and fauna habitat.

Under the current project approval, Integra is required to implement an offset strategy comprising a minimum 373 hectares (ha) of biodiversity offset areas. The revised offset strategy would increase the total offset area by approximately 40 ha (approximately 7%) from 575 ha to almost 615 ha (see Table 1). Figures 6 and 7 show the vegetation communities mapped within the revised biodiversity offset areas.

Table 1: Summary Comparison of the Approved and Revised Biodiversity Offset Areas (ha)

Offset area	Currently Approved	Revised
On-site		
Western Biodiversity Offset Area	93	-
Supplementary Biodiversity Offset Area	35.8	-
Northern Biodiversity Offset Area	117.5	88.5
Southern Biodiversity Offset Area	40	30.4
Bridgman Biodiversity Offset Area	86	86.5
Martins Creek Biodiversity Offset Area	203	193.6
Off-site		
Appletree Flat Biodiversity Offset Area	-	215.9
Total	575.3	614.9

The revised offset strategy would also increase the total area of native vegetation in the biodiversity offset areas by approximately 212 ha (or around 31%) due to the addition of the Appletree Flat Biodiversity Offset Area that is predominantly comprised of remnant vegetation.

Threatened Vegetation Communities

The *Central Hunter Ironbark-Spotted Gum-Grey Box Forest EEC*² and *Swamp Oak Floodplain Forest EEC*³ listed under the NSW *Threatened Species Conservation Act 1995* will both be impacted by approved mining operations at the Complex.

Approximately 87 ha of *Narrow-leaved Ironbark-Spotted Gum-Grey Box Open Forest* and 37 ha of *Swamp Oak Floodplain Forest* would be cleared under the existing project approval. Integra's revised Biodiversity Offset Strategy provides for an offset of 202.8 ha of *Narrow-leaved Ironbark-Spotted Gum-Grey Box Open Forest* (an offset ratio of 2.3:1) and almost 49.7 ha of *Swamp Oak Forest EEC* (an offset ratio of 9.9:1), which in each case is slightly less than the currently approved offsets for these communities. The equivalent figures under the currently approved offset strategy are 213.8 ha and 53.4 ha (see Table 2).

Table 2: Summary Comparison of Offset Ratios for Native Vegetation (Areas in ha)

Vegetation community	Approved impacts	Approved Offsets		Revised Offsets*	
		Area	Ratio	Area	Ratio
<i>Narrow-leaved Ironbark-Spotted Gum-Grey Box Open Forest (Central Hunter Ironbark-Spotted Gum-Grey Box Forest EEC)</i>	87.2	213.8	2.4:1	202.8	2.3:1
<i>Swamp Oak Floodplain Forest EEC</i>	5.0	53.4	10.7:1	49.7	9.9:1
Shrubland	0.7	0	n/a	0	n/a
Tussock Grassland	9.1	0	n/a	0	n/a
Other woodland and forest (includes regeneration/shrubland)	0	45.0	n/a	252.3	n/a
Total native vegetation (% of total area)	102.1 (25%)	292.2 (51%)	2.9:1	504.8 (82%)	4.9:1
Other (exotic grassland, cleared/disturbed areas)	311.6	283.1	n/a	110.1	n/a
Total area	413.7	575.3	1.4:1	614.9	1.5:1

*Includes regeneration of derived native grassland and native pasture within the biodiversity offset areas (not mine rehabilitation).

These slight reductions should be seen within the context of the existing project approval. Under the approval, Integra is required to include at least 140 ha of *Central Hunter Ironbark-Spotted Gum-Grey Box Forest EEC* (or a suitable equivalent) Biodiversity Offset Strategy. Thus the revised strategy continues to substantially exceed this requirement. The revised (ie remaining) on-site offset areas would provide for approximately 115 ha of remnant woodland representative of this EEC and approximately 87 ha of Derived Grassland/Native Pasture that Integra proposes to regenerate back to woodland representative of this EEC.

OEH raised some concerns about the Strategy's partial reliance on regeneration instead of extant remnant vegetation to meet the offset target for this EEC. However, the regeneration component of the revised offset for this EEC is quite small. Passive regeneration of only about 24.5 ha is proposed, as against 87 ha of active revegetation of Derived Grassland/Native Pasture and about 115 ha of intact remnant woodland.

Threatened Fauna Species

The habitat values of the revised offset areas would continue to provide equivalent or improved offsets for all of the threatened fauna species required to be offset under the project approval, including the Squirrel Glider, Grey-crowned Babbler, Eastern Bent-wing Bat, Eastern Freetail Bat, Yellow-bellied Sheathtail Bat, Grey-headed Flying Fox, Speckled Warbler, Brown Treecreeper and Brush-tail Phascogale. Of these species, the Speckled Warbler has been identified on the Appletree Flat Biodiversity Offset Area and the Eastern Bent-wing Bat and Squirrel Glider are considered likely to occur at these sites given the habitat present and recent nearby records.

² Both the *Narrow-leaved Ironbark-Spotted Gum-Grey Box Open Forest* vegetation community and the *Narrow Leaf Ironbark-Spotted Gum-Forest Red Gum* vegetation community specified in the project approval are considered representative of the *Central Hunter Ironbark-Spotted Gum-Grey Box Forest* in the NSW North Coast and Sydney Basin Bioregions EEC (herein referred to as *Central Hunter Ironbark-Spotted Gum-Grey Box Forest EEC*).

³ Defined as the *Swamp Oak Floodplain Forest* of the NSW North Coast, Sydney Basin and South East Corner Bioregions EEC.

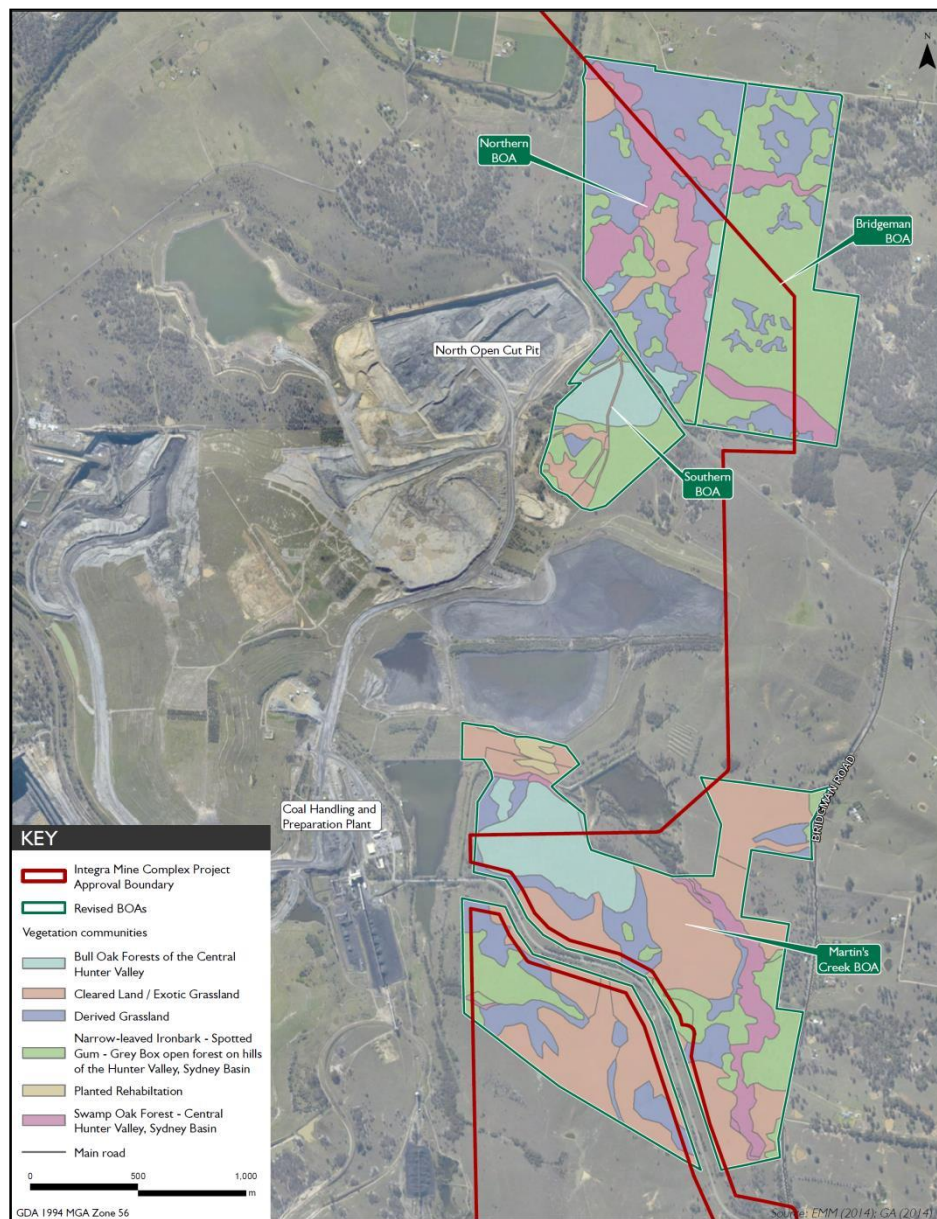


Figure 6: Vegetation Communities (Revised On-site Offset Areas)



Figure 7: Vegetation Communities (Appletree Flat Offset Area)

The RTS indicates that five of these species' habitats would continue to be met by the habitat wholly included in the revised on-site offset areas (ie the Brush-tail Phascogale, Brown Treecreeper, Speckled Warbler, Grey-crowned Babbler and Squirrel Glider).

Appletree Flat Biodiversity Offset Area

A number of submissions were critical of the suitability of the Appletree Flat Biodiversity Offset Area on the basis that it was located some distance from the Complex and contained different vegetation communities and fauna habitats to those impacted at the Complex.

As discussed above, the revised on-site offset strategy would continue to provide equivalent offsets for the threatened species and vegetation communities impacted by the Complex. In regards to the composition of the new Appletree Flat Biodiversity Offset Area, the Department acknowledges the difficulties in sourcing suitable offsets directly within the Hunter Valley that contain like-for-like vegetation communities and is satisfied that a number of options were investigated by Integra with due consideration for the relevant biodiversity criteria. The particular values of the Appletree Flat Biodiversity Offset Area are in respect of it comprising two large inholdings within the surrounding Wollemi National Park, both of which contain known and potential habitat for a variety of threatened species. However, it is accepted that neither site contains either of the EECs which are approved for disturbance at the Complex.

Overall, the Department is satisfied that the Appletree Flat Biodiversity Offset Area is likely to provide a valuable contribution to regional biodiversity values given that it:

- contains intact habitats that have already been demonstrated to support threatened species such as the Speckled Warbler, Varied Sittella and Turquoise Parrot;
- contains known and potential habitats suitable for other threatened fauna species, which as described above, includes some of the species required to be offset under the project approval;
- is located within an existing important contiguous area of habitat conservation;
- would provide a valuable contribution to the regional remnant of native vegetation and habitats located between the Upper Hunter Valley and the coast; and
- would be secured for conservation in the long term via the recommended conditions of approval (see **Appendix D**).

Biodiversity Values of the On-Site Biodiversity Offset Areas

The Department notes that the modification does not in itself propose any physical disturbance to any of the existing on-site biodiversity offset areas, including those areas to be excised from the approved Biodiversity Offset Strategy. Any future proposal by Integra to access the underlying coal resource in these areas would be subject to a full merit assessment and approvals process, including with respect to biodiversity impacts.

Management, Monitoring and Long Term Security of Biodiversity Offset Areas

Under the current project approval, Integra is required to lodge a conservation bond with the Department to ensure that the Biodiversity Offset Strategy is implemented in accordance with the performance and completion criteria within the Biodiversity Management Plan. The Department has recommended this condition be retained but updated to reflect contemporary requirements, which requires Integra to review and if necessary revise the conservation bond amount to reflect the Biodiversity Offset Strategy, including revegetation activities. Integra has proposed to include a works program for its revegetation activities in a revised Biodiversity Management Plan.

In consideration of its concerns regarding regeneration of *Narrow-leaved Ironbark-Spotted Gum-Grey Box Open Forest EEC* communities, OEH recommended that Integra should be required to commission an independent audit of the biodiversity offset areas within five years of the modification being approved to assess whether rehabilitation works have substantially commenced. The Department has recommended a condition which reflects OEH's recommendation, requiring the Proponent to undertake an audit of all biodiversity areas subject to restoration as Central Hunter Ironbark-Spotted Gum-Grey Box Forest EEC, and provide a report to the Department by the end of October 2020. The Department is satisfied that the provisions of this audit condition adequately addresses OEH and community concerns regarding Integra's commitments to rehabilitate biodiversity offset areas as *Narrow-leaved Ironbark-Spotted Gum-Grey Box Open Forest EEC* as required by the project approval.

The Department has also recommended conditions requiring Integra to update its Biodiversity Management Plan (including a program of works for revegetation activities) in consultation with OEH. Additional focus on the measures to be implemented for the restoration and regeneration of vegetation and habitat has also been included in the procedures required to be developed in the Biodiversity

Management Plan. The Department is satisfied that the implementation of these measures would enable effective monitoring and reporting of revegetation activities.

Although the Complex is currently under care and maintenance, the Department notes that Integra would continue to be required to meet its current management and monitoring obligations under the project approval, as well as implement all commitments set out in the EA (**Appendix A**), RTS (**Appendix C**) and updated Biodiversity Management Plan. Further, Integra's implementation of rehabilitation and land management requirements would continue to be documented in the Complex's Annual Review and made available to the community on Integra's website, in accordance with project approval conditions.

5.2 Final Landform

The conceptual final landform plan for the Complex has been updated to reflect the revised on-site offset areas (see **Appendix D**). The final landform design would also be subject to ongoing consultation and approval by the DRE as part of Integra's Mining Operations Plan for the Complex, as required under the *Mining Act 1992*.

6 RECOMMENDED CONDITIONS

The Department has drafted a Notice of Modification (see **Appendix D**) for the modification, as well as a consolidated version of the project approval as proposed to be modified (see **Appendix E**). Integra has reviewed and accepted the recommended conditions. Glencore and Bloomfield Group have reviewed and accepted the recommended conditions in principle. The Bloomfield Group, as the future proponent likely to be responsible for implementing the biodiversity offsets, has also indicated that it is prepared to implement all biodiversity offset commitments made by Integra in the EA and the RTS.

7 CONCLUSION

The Department has assessed the merits of the modification application, the supporting EA, all public and agency submissions and Integra's RTS, in accordance with the requirements of the EP&A Act.


Based on this assessment, the Department is satisfied that Integra has investigated all reasonable and feasible options in its development of an alternative offset strategy and that a modification is justified in this instance to avoid sterilisation of a significant coal resource. The Department acknowledges that Integra's intentions to investigate an alternative Biodiversity Offset Strategy to avoid this land conflict was publicised prior to this modification application. The Department notes that the modification does not in itself propose any mining or other physical disturbance to the biodiversity offset areas to be excised from the currently approved offset strategy. The existing biodiversity values associated with these areas and their connectivity with the remaining offset areas would not be affected. Any future proposal by Integra to access the underlying coal resource would be subject to a full merit assessment and approvals process.


The Department is satisfied the revised Biodiversity Offset Strategy adequately satisfies the offset requirements in the project approval that were established to offset the biodiversity impacts of the Complex. The Department considers that, subject to implementation of Integra's existing and proposed biodiversity management measures as well as the Department's recommended conditions, the revised Biodiversity Offset Strategy would improve or maintain the biodiversity values of the region over the medium to long term.

8 RECOMMENDATION

It is **RECOMMENDED** that the Planning Assessment Commission, as delegate of the Minister for Planning:

- **considers** the findings and recommendations of this report;
- **determines** that the proposed modification is within the scope of section 75W of the EP&A Act;
- **approves** the application to modify the project approval, subject to conditions, under section 75W of the EP&A Act; and
- **signs** the attached Notice of Modification to the project approval (see **Appendix D**).


Howard Reed
Director
Resource Assessments
16-11-15

 16/11/15
Oliver Holm
Executive Director
Resource Assessments and Compliance

APPENDIX A: ENVIRONMENTAL ASSESSMENT

Refer to Department's website:

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=6539

APPENDIX B: COPY OF SUBMISSIONS

Refer to Department's website:

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=6539

APPENDIX C: RESPONSE TO SUBMISSIONS

Refer to Department's website:

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=6539

APPENDIX D: NOTICE OF MODIFICATION

