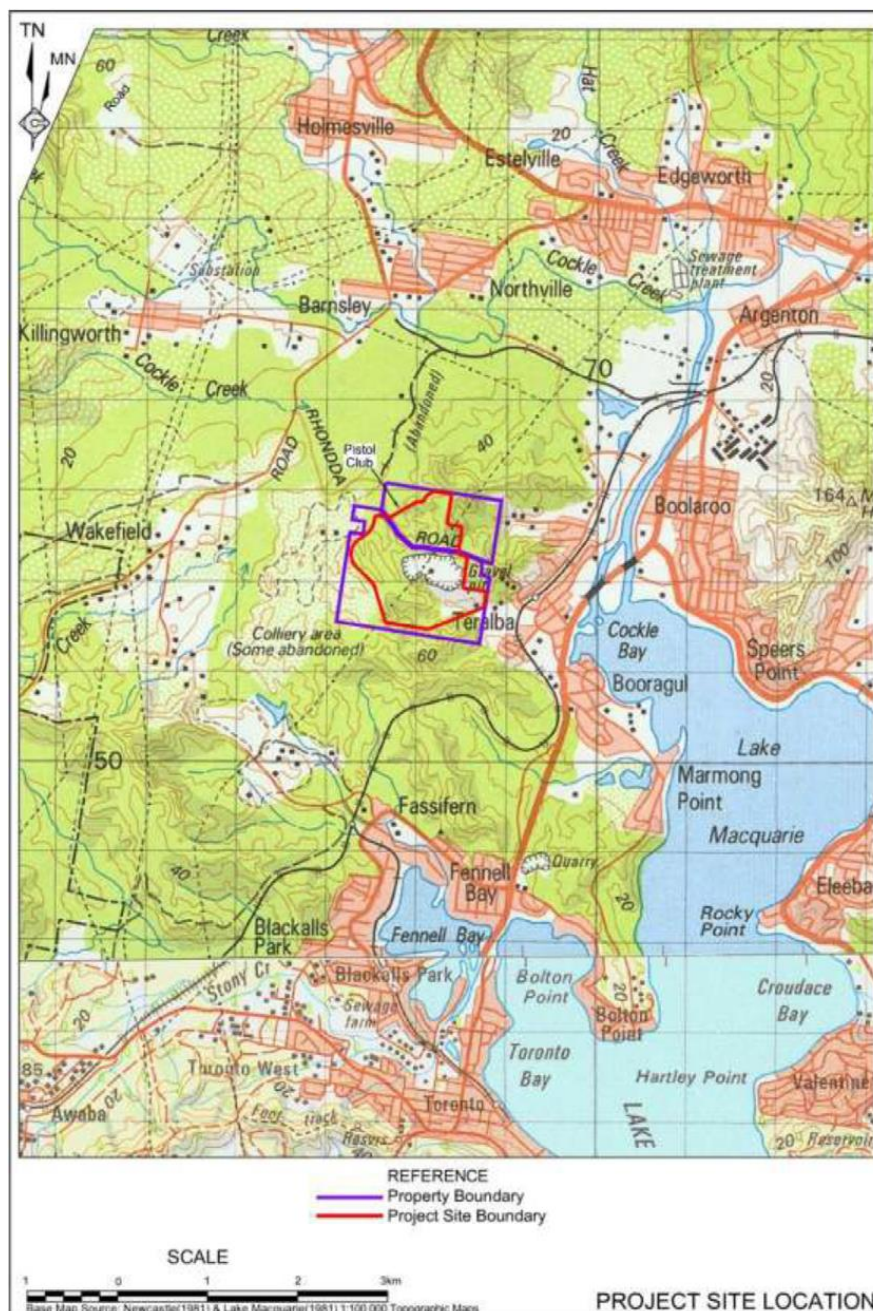


## Teralba Quarry Extension Project Modification 1- Biodiversity Conditions (MP 10\_0183 Mod 1)

### Environmental Assessment Report Section 75W of the *Environmental Planning and Assessment Act 1979*

#### 1. BACKGROUND

Teralba Quarry is a hard rock quarry located approximately 20 kilometres south of Newcastle, on the western side of Lake Macquarie (see **Figure 1**).



**Figure 1: Location of the Teralba Quarry**

The quarry is situated within the Lake Macquarie local government area (LGA), with the residential suburb of Teralba located to the east of the project site. The quarry is located on two lots of private land off Rhondra Road which are owned by the Trust for A C Fowkes and leased to the operator of the quarry, Metromix Pty Ltd (Metromix). Metromix in turn is jointly owned by building resource supply companies Holcim (Australia) Pty Ltd and Hanson Australia Pty Ltd. The quarry supplies aggregates to concrete, road and construction industries.

The quarry has been in operation since 1965, originally under an approval granted by Lake Macquarie City Council. The current approval for the Teralba Quarry Extension Project MP 10\_0183 (the project), was granted on 22 February 2013, by the Director-General of the Department of Planning and Infrastructure, as delegate of the Minister for Planning and Infrastructure.

This approval allows extraction of up to 1.2 million tonnes per annum of hard rock material, processing of extracted material on site and transport of quarry products from the site via public roads, until 31 December 2038.

The approval also permits the clearing of 26.5 hectares (ha) of native vegetation in order to accommodate quarrying operations within the Northern and Southern Extension areas, with a requirement to submit a Biodiversity Offset Strategy (BOS), as described in the project's Environmental Assessment (EA), and to be implemented to the satisfaction of the Secretary. The project's EA and associated Statement of Commitments commit to retaining 142.6 ha of existing vegetation surrounding the project area as a legally protected Biodiversity Offset Area (BOA), registered under a conservation agreement in perpetuity.

The project's EA provided a calculation of biodiversity offset credits required for this clearing, using the Office of Environment and Heritage's (OEHS) approved Biobanking Assessment Methodology. This required 1,710 ecosystem credits and 1,103 species credits to be retired. The ecosystem credits were reduced by 367 to 1,343 due to allowances for rehabilitation to be completed onsite.

Metromix committed to retire the remaining credit obligations by retaining 142.6 hectares of native vegetation area encircling the quarry area, which was to be set aside as an on-site BOA protected in perpetuity. The final offset area proposed and accepted as part of the project is identified in Appendix 5 of the approval. The land required for the offset is privately-owned, and leased by Metromix for the life of the project approval. The conditions of approval require this land to be secured in perpetuity for conservation purposes.

## 2. PROPOSED MODIFICATION

On 28 November 2017, Metromix lodged a modification application under section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The application seeks to modify the project approval conditions relating to the BOS to allow Metromix to access a greater range of options for the retirement of biodiversity credits than currently permitted. This would facilitate the finalisation of a BOS for the project.

The BOS required under condition 52 of Schedule 3 of the project approval has not yet been submitted for approval to the Secretary due to issues arising during preparation of a conservation agreement for the land identified in the project approval. In particular, under the biodiversity legislation current at the time of determination and the wording of the project approval, Metromix's application to OEHS for registration of a Biobanking agreement over the subject land could not be approved as the land was already considered subject to an offset agreement because of the terms of the project approval.

To overcome this impediment, the proposed modification seeks to amend the current BOS obligation from a land-based offset in hectares to a biodiversity credits-based offset requirement. This would release the land from any legal offset agreement under the project approval, and Metromix would be free to pursue a more contemporary land-based agreement or other mechanisms for the retirement of credits as permitted under the *Biodiversity Conservation Act 2016* (BCA) which commenced in August 2017.

In addition, several other conditions of the project approval governing biodiversity would require contemporising in order to reflect the proposed changes.

The proposed modification also seeks approval for the staged retirement of biodiversity credits. Metromix proposes that the staged retirement of credits align with the progression of approved extraction activities. These matters are discussed further in **Section 5**.

A description of the proposed modification is included in the EA and supplementary information for the modification (see **Appendices A and C**).

### 3. STATUTORY CONTEXT

The project was considered a major project under the now-repealed Part 3A of the EP&A Act, as it was development for the purpose of an extractive industry that would extract more than 200,000 tonnes of extractive material a year from a resource of more than 5 million tonnes.

#### 3.1 Section 75W

Despite the repeal of Part 3A, the project is a transitional Part 3A project under Schedule 2 to the *EP&A (Savings, Transitional and Other Provisions) Regulation 2017*. The power to modify transitional Part 3A projects under section 75W of the EP&A Act as in force immediately before its repeal on 1 October 2011, is now being wound up. However, as the request for this modification was made before the 'cut-off date' of 1 March 2018, the provisions of Schedule 2 (clause 3) continue to apply.

Consequently, this report has been prepared in accordance with the requirements of Part 3A and associated regulations, and the Minister (or his delegate) may determine the proposed modification under section 75W of the EP&A Act.

The Department is satisfied that the proposed modification is administrative in its nature and within the scope of section 75W, and may be determined accordingly.

#### 3.2 Approval Authority

The Minister for Planning is the approval authority for the application. However, the Director Resource Assessments may determine the application under the Minister's delegation of 11 October 2017, given that Council did not object to the proposal, no public objections were received and no political donations have been reported by Metromix.

#### 3.3 Environmental Planning Instruments

A number of environmental planning instruments apply to the modification including:

- *State Environmental Planning Policy (SEPP) (Mining, Petroleum Production and Extractive Industries) 2007*;
- *SEPP (Infrastructure) 2007*;
- *SEPP (State and Regional Development) 2011*;
- *SEPP No 33 – Hazardous and Offensive Development*;
- *Lake Macquarie Local Environmental Plan (LEP) 2004*; and
- *Lake Macquarie LEP 2014*.

#### 3.4 Commonwealth Approval

On 11 July 2011, the then Commonwealth Department of Sustainability, Environment, Water, Population and Communities (Commonwealth) determined the original project proposal to be "*Not a controlled action if undertaken in a particular manner*", under sections 75 and 77A of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), due to its potential impacts on Matters of National Environmental Significance.

In making its determination, the Commonwealth decreed that the proposed action must be undertaken in the manner set out in its Referral Decision EPBC 2011/5988 in order to avoid significant impacts on listed threatened species and communities.

The Department considers that the question of whether the amended project approval conditions proposed by Metromix are in full accord with the Commonwealth's requirements is a matter solely for the consideration of Metromix and the Commonwealth. Consequently, this matter is not considered as part of this assessment. Metromix should consult the Commonwealth in regard to the proposed modification, as further approval may be required should its BOA change.

### 4. CONSULTATION

After accepting the EA for the proposed modification, and considering the minor nature of the proposed modification, the Department did not undertake public exhibition. However, the modification application and EA were made publicly available on the Department's website.

The Department also invited two authorities with relevant interests to comment on the EA, being the **Office of Environment and Heritage** (OEH) and **Lake Macquarie City Council** (Council). Both responded with submissions (see **Appendix B**). The Department is satisfied that the notification process met the requirements of the EP&A Act and the *Environmental Planning and Assessment Regulation 2000*.

**OEH** had previously advised Metromix that a modification of the project approval was required to move forward with the registration of the BOA as described in the approval, and therefore supported the modification. OEH was satisfied with the assessment of biodiversity credits provided in the EA and proposed several conditions of approval to reflect the new BCA including timing of species credit retirement and the use of rehabilitation to offset credit requirements.

**Council** questioned the impact that the potential loss of the existing BOA land would have on the larger native vegetation corridor surrounding the quarry site. The surrounding area is mapped as high ecological value in Council's LEP and contains habitat for threatened species listed under the BCA.

Council was also concerned that alternate mechanisms for the retirement of credits, such as purchasing biodiversity credits on the open market or payment to the Biodiversity Conservation Trust, would not necessarily result in biodiversity offsets within the Lake Macquarie LGA. Council proposed that any modification to the project approval should reference the BOA and require this land to be secured in perpetuity.

Following Metromix's response, Council provided final comment acknowledging that the proposed BOS is consistent with the BCA and supporting regulations.

These matters are discussed further in **Section 5**.

#### 4.1 Response to Submissions

On 15 February 2018, Metromix provided a Response to Submissions (RTS – see **Appendix C**) to address the issues raised in agency submissions. The RTS highlighted Metromix's preference for a staged approach to biodiversity offsetting. The RTS noted OEH's agreement to Metromix's credit calculations and proposed conditions. It also addressed issues raised by Council by indicating that any future development or clearing of the existing BOA would likely require consultation with, and approval from, Council.

Metromix responded to Council's concerns over loss of local biodiversity by offering to give preference to purchasing credits on the open market from within the Lake Macquarie LGA. Metromix considered that Council's request to retain reference to the BOA in the project approval would result in a doubling of its offset obligations and would be unreasonable and not consistent with the BCA.

In response to requests from the Department, Metromix also provided additional information on its staged approach, timing of stages and method of credit retirement for the proposed BOS. These matters are discussed further in **Section 5.3**.

The RTS and additional information received from Metromix have been made publicly available on the Department's website. These documents are included in **Appendix C**.

## 5. ASSESSMENT

The Department has assessed the merits of the proposed modification in accordance with the relevant objects and requirements of the EP&A Act. In assessing these merits, the Department has considered the:

- EA for the original project application;
- conditions of approval for the project as originally approved;
- modification application and associated EA, RTS and additional information; and
- relevant environmental planning instruments, policies and guidelines.

The Department considers the key issues associated with the modification relate to biodiversity and are:

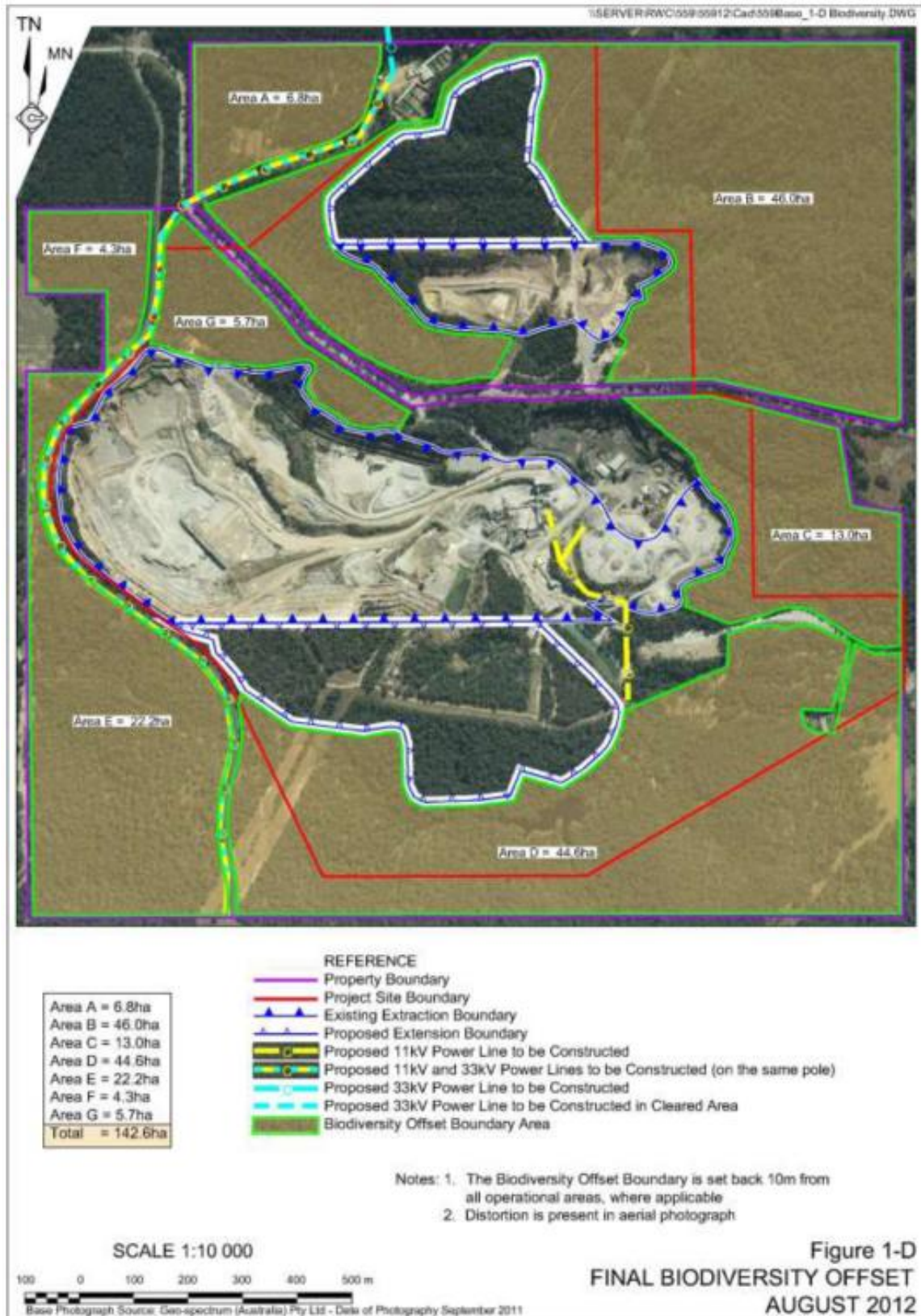
- issues with implementing the BOA required under the current project approval;
- biodiversity impacts and credit calculations; and
- proposed BOS and proposed staged approach.

Consideration of these issues is provided below.



### 5.1 Current Approval and Issues with Implementing the Biodiversity Offset Area

The current approval permits Metromix to clear approximately 26 ha of vegetation across the Southern Extension and Northern Extension areas provided that the biodiversity impacts are offset by an on-site BOA of 142.6 ha (ratio of 5:1) of equivalent vegetation encircling the quarry site to be protected in perpetuity. The existing on-site BOA is identified in **Figure 2** below:



**Figure 2: Existing Biodiversity Offset Area**

Under the project approval Metromix is required to enter into a conservation agreement over the BOA pursuant to section 69B of the *National Parks and Wildlife Act 1974*. This would secure the area for conservation in perpetuity. Since the land allocated for the approved offset is privately-owned and is leased to Metromix for the quarry operation, any offsetting arrangement over the land would require to be registered in the name of the landowner.

The Department further understands that the current wording of the approval prevents Metromix from registering a Biobanking Agreement over the land with OEH, as the land is considered to already be subject to biodiversity conservation measures due to the terms of the project approval. Under the now-repealed *Threatened Species Conservation (Biodiversity Banking) Regulation 2008*, the Minister for the Environment was prevented from registering a biobanking agreement over land that is already nominated to be managed for biodiversity conservation under a Part 3A approval. This provision was intended to prevent 'double-counting' rather than to prevent intended outcomes of a project approval being met.

In these circumstances, Metromix decided to wait for the implementation of the new biodiversity legislation, which introduced new provisions for the retirement of biodiversity obligations. The Department accepts that the delay in providing a BOS and securing the BOA has not been within Metromix's control. The Department agreed to defer further consideration of securing the BOA and the deadline for the submission of the BOS until after the commencement of the new biodiversity conservation legislation.

On 25 August 2017, the BCA and *Biodiversity Conservation Regulation 2017* commenced. Under this new legislation, Metromix would be able to pursue registration of the BOA or seek alternate methods for the retirement of credits in accordance with the new Biodiversity Offsets Scheme.

The Department considers that the proposed modification is necessary to enable Metromix to satisfy its biodiversity offsetting obligations.

To this end, the Department has recommended conditions requiring Metromix to immediately prepare and submit a BOS, and to retire biodiversity credits in a timely manner from areas where clearing has already commenced. These matters are discussed further in **Section 5.3**.

## 5.2 Biodiversity Impacts and Credits

The EA was accompanied by additional documents detailing the biodiversity credit calculations. The credit obligation was originally calculated in 2012 using OEH's then current assessment tool, the *Biobanking Assessment Methodology 2014* (BBAM Version 2.0). It assessed the impacts of clearing 26 ha of native vegetation within the Northern and Southern Extension areas (see Annexure 9 of **Appendix A**).

OEH reviewed and agreed with the assessed credit obligation calculated under the *Biobanking Assessment Methodology 2014* and the proposed credit conversions provided by Metromix, confirming that no further assessment of credit obligation was required. Under the proposed modification, these biodiversity credits would now be retired in accordance with the BCA Biodiversity Offset Scheme.

The 26 ha of vegetation to be cleared consists predominantly of good quality HU631 '*Spotted Gum – Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin*' (HU631). This vegetation type is equivalent to PCT 1589 '*Spotted Gum – Broad-leaved Mahogany – Grey Gum grass – shrub open forest on Coastal Lowlands of the Central Coast*' (PCT 1589) due to recent changes to vegetation classifications to align with the BCA. Neither classification is an endangered ecological community under State or Commonwealth legislation.

Within the Southern Extension area were 75 individuals of the plant species *Tetratheca juncea* (Black-eyed Susan), which is listed as vulnerable under both the Commonwealth EPBC Act and the NSW BCA, and which occurs in HU631 communities. To partially address impacts on this species, Metromix committed to translocating up to 68 of the identified individuals from the Southern Extension area prior to clearing, and undertaking additional surveys of the approved BOA to identify more clumps of *Tetratheca juncea* to account for any species deficits.

The Department considers that, since clearing in the Southern Extension area has already begun, and some of these individuals of *Tetratheca juncea* have been translocated, this management action should be included in the BOS.

Eight threatened fauna species were observed on-site, with the Eastern Bent-wing Bat and the Little Bent-wing Bat observed within areas to be cleared. The Department considers that this impact can continue to be managed under the existing conditions of the project approval which relate to fauna habitat.

The proposed clearing requires 1,710 ecosystem credits to be retired, in respect of PCT 1589 and 1,103 species credits for *Tetratheca juncea*. The ecosystem credit obligation was reduced from 1,710 credits to 1,343 credits due to the application of rehabilitation credits. Under the new BCA, Metromix would be unable to use any future rehabilitation areas to retire biodiversity credits for the proposed quarry modification.

The Department has carefully reviewed the predicted impacts on biodiversity as previously approved. The Department is satisfied that the proposed modification is unlikely to result in any additional environmental impacts. The existing impacts on biodiversity can be appropriately managed under existing and proposed conditions of approval.

The Department considers that this proposed modification would resolve the impasse over the registration of land, and allow Metromix to move forward with retiring its biodiversity credit obligations through either a biodiversity stewardship agreement or other option available under the BCA. Any proposal for the retirement of credits would still require further approval by the Department through approval of the BOS and registration of agreements with OEH.

### 5.3 Biodiversity Offset Strategy and Proposed Staged Approach

The supplementary RTS provided a framework for the BOS and highlighted Metromix's preferred option to progressively retire the required ecosystem credits, in six stages aligned with its proposed extraction schedule. Metromix has divided the Northern and Southern Extension areas into six project stages as identified in **Figure 3** and **Appendix C**.

While the Department does not object to progressive retirement of credits, it considers that, as clearing and translocation activities have already occurred in Stage 1 of the Southern Extension area, retirement of credits for this area should be prioritised. Metromix also proposes to retire all 1,103 species credits for the *Tetratheca juncea* plants by the end of 2018.

The project approval allows for quarrying operations to occur until 31 December 2038 and this modification is not seeking an extension of this date. Therefore, to approve the retirement of ecosystem credits beyond this date, as suggested by Metromix, is not considered reasonable by the Department. The Department also considers that a six-stage progressive retirement is overly complex.

The Department therefore recommends a three-staged approach to the retirement of biodiversity credits over the life of the project, as set out in **Table 1** below.

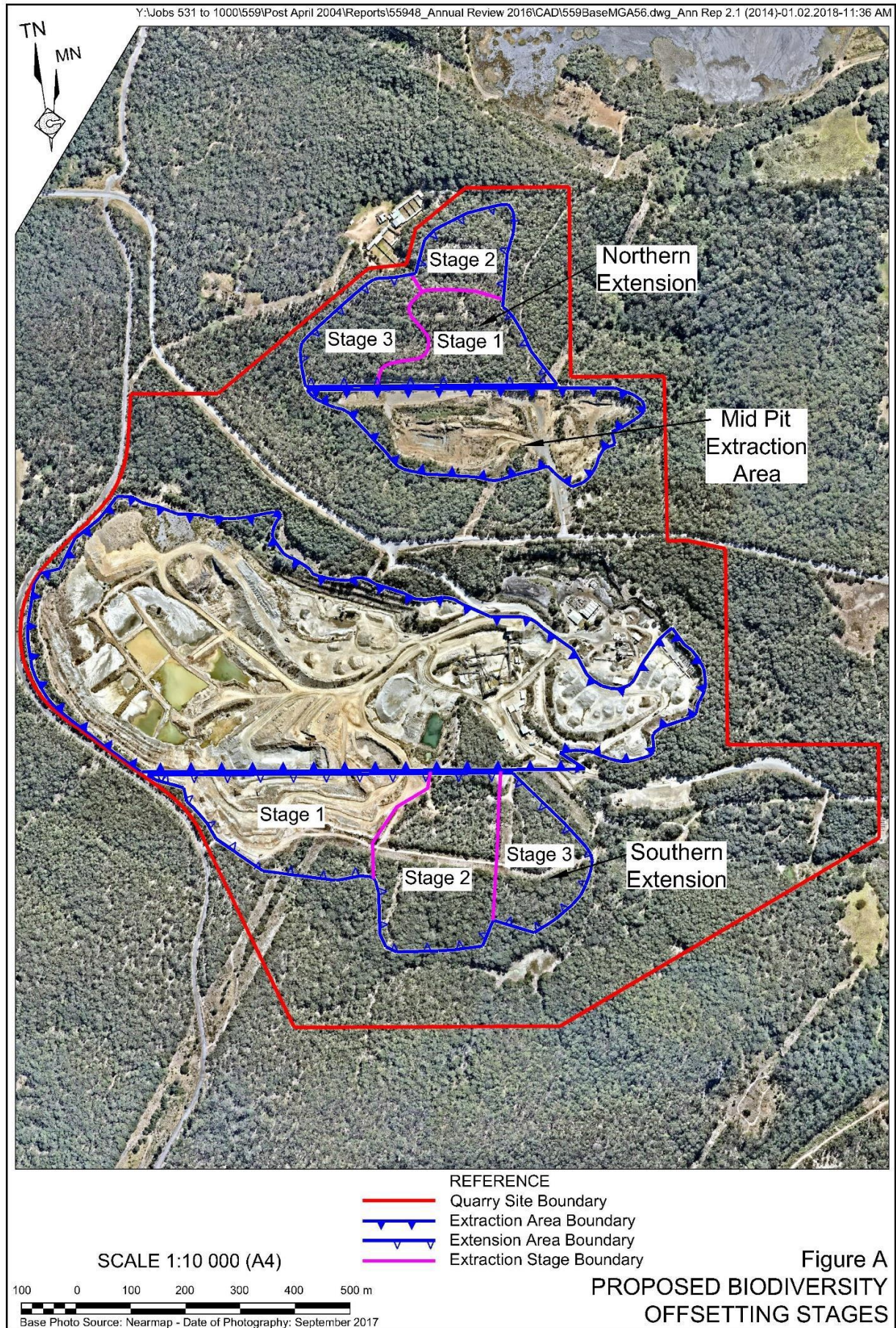
**Table 1: Proposed biodiversity offsetting stages, timing and credits to be retired**

<b>Retirement Stage</b>	<b>Extraction Stages</b>	<b>Indicative Timing</b>	<b>Area (ha)</b>	<b>Ecosystem Credits</b>
Stage 1	Southern Stages 1 and 2	Present - 2027	12.37	670
Stage 2	Southern Stage 3	2028 – 2034	3.16	171
Stage 3	Northern Stages 1, 2 and 3	2035 - 2038	9.27	502

For Stage 1, Metromix would be required to retire 670 ecosystem credits by the end of 2018, reflecting the clearing of Southern Extension Stages 1 and 2. This accounts for a significant portion of the total obligation, which would offset approximately 15 years of clearing and quarrying operations from the date of the grant of the project approval (February 2013). The Department has also proposed conditions to ensure retirement of all 1,103 species credits for *Tetratheca juncea* by the end of 2018.

Stage 2 would require a smaller retirement of 171 ecosystem credits, reflecting intended clearing of Southern Extension Stage 3 indicatively in 2028. Stage 3 would require the remaining 502 ecosystem credits, reflecting Northern Extension Stages 1, 2 and 3 to be retired indicatively in 2035.





**Figure 3: Metromix's proposed biodiversity offset stages within the Northern and Southern Quarry Extensions**



**Recommended Conditions of Approval**

The Department proposes the following modified conditions of project approval.

54. By 31 December 2018, unless otherwise approved by the Secretary, the Proponent must retire all biodiversity credits listed in Table 8 to the satisfaction of the Secretary and OEH.

*Table 8: Biodiversity Credits to be retired by 31 December 2018*

<b>Credit Type</b>	<b>Offset Type</b>	<b>Number of Credits</b>
Ecosystem Credits	PCT1589 'Spotted Gum – Broad-leaved Mahogany – Grey Gum grass – shrub open forest on Coastal Lowlands of the Central Coast'	670
Species Credits	Black-eyed Susan ( <i>Tetralochea juncea</i> )	1103

- 53A. Prior to any vegetation clearing in Southern Extension Stage 3 (see Figure 7 of Appendix 5) the Proponent must retire all biodiversity credits identified in Table 8a to the satisfaction of the Secretary and OEH.

*Table 8a: Biodiversity credits to be retired prior to vegetation clearing in Southern Extension Stage 3*

<b>Credit Type</b>	<b>Offset Type</b>	<b>Number of Credits</b>
Ecosystem Credits	PCT1589 - 'Spotted Gum – Broad-leaved Mahogany – Grey Gum grass – shrub open forest on Coastal Lowlands of the Central Coast'	171

- 53B. Prior to any vegetation clearing in Northern Stages 1, 2 or 3 (see Figure 7 of Appendix 5) the Proponent must retire all ecosystem credits identified in Table 8b:

*Table 8b: Biodiversity credits to be retired prior to vegetation clearing in Northern Extension Stages 1, 2 or 3*

<b>Credit Type</b>	<b>Offset Type</b>	<b>Number of Credits</b>
Ecosystem Credits	PCT1589 - 'Spotted Gum – Broad-leaved Mahogany – Grey Gum grass – shrub open forest on Coastal Lowlands of the Central Coast'	502

OEH has reviewed the Department's proposed three-staged approach and given its support.

The Department considers that the conversion of the existing BOA requirement back to the originally-calculated biodiversity credit obligation is a practical resolution to the issues encountered by Metromix during the conservation agreement process.

The Department has carefully considered the potential impacts of releasing the land surrounding the quarry from a conservation agreement and is satisfied that Metromix can secure sufficient credits or utilise additional mechanisms allowed by the BCA to offset these impacts. The Department has also recommended approval conditions to prevent Metromix from commencing subsequent clearing stages until the credits for that clearing have been retired.

The Department is satisfied that the proposed modification would not result in any increase in environmental impacts. Biodiversity impacts were assessed under the previous EA, and the Department's current assessment did not identify any additional impacts resulting from the proposed modification.

The Department considers that the previously approved biodiversity impacts can be appropriately managed under the proposed conditions of approval. The proposed staged approach to offsetting can also be managed under the proposed conditions of approval.

## **6. RECOMMENDED CONDITIONS**

The Department has drafted a recommended Notice of Modification (see **Appendix D**) and consolidated version of the project approval as it is proposed to be modified (see **Appendix E**). Apart from the proposed amendments to the biodiversity management conditions, the Department has taken the opportunity to review

the overall approval and include updated conditions that are consistent with current practice and standards. The proposed changes to the approval include:

- revision, update and consolidation of specific environmental conditions to align with the Department's contemporary standards for noise, air quality, blasting, biodiversity, water and traffic management;
- revision, update and consolidation of administrative and reporting conditions to align with the Department's contemporary standards; and
- update to the requirements for the calculation of the Rehabilitation Bond.

The Department considers that the environmental impacts of the project can be appropriately managed through the existing, modified and updated conditions of approval, and updated management plans. The recommended conditions of approval require Metromix to prepare and submit a BOS by 30 June 2018, and an updated Biodiversity and Rehabilitation Management Plan within 12 months of approval of the modification.

Metromix has reviewed and accepted the recommended conditions.

## 7. CONCLUSION

The Department has assessed the modification application, EA and submissions in accordance with the relevant requirements of the EP&A Act. The Department has carefully considered the likely impacts of the proposal on the natural environment and on the biodiversity of the site. The Department is satisfied that the proposed modification would not result in additional environmental impacts over those originally approved. Moreover, the Department is satisfied that environmental impacts from the project can be appropriately managed by existing, modified and updated conditions of approval.

The proposed modification would provide Metromix with additional flexibility for the retirement of credits as it would be able to access a range of offsetting options in accordance with the BCA's Biodiversity Offset Scheme. This may include purchasing credits on the open market, acquiring a land-based offset, or contributing to the newly established Biodiversity Conservation Fund.

The Department is therefore satisfied that the proposed modification is in the public interest and should be approved, subject to conditions.

## 8. RECOMMENDATION

It is recommended that the Director, Resource Assessments, as delegate for the Minister for Planning:

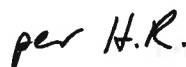
- **consider** the findings and recommendations of this report;
- **determine** that the application Teralba Quarry Extension Modification 1, MP 10\_0183, falls within the scope of section 75W of the EP&A Act;
- **modify** the approval MP 10\_0183, subject to conditions; and
- **sign** the attached approval of the modification (**Appendix C**).

Recommended by:



Melissa Anderson  
**Environmental Assessment Officer**  
**Resource Assessments**

Recommended by:



Colin Phillips  
**Team Leader**  
**Resource Assessments**

## 9. DECISION

Approved by:



Howard Reed  
**Director**  
**Resource Assessments**  
as delegate of the Minister for Planning

## APPENDIX A: ENVIRONMENTAL ASSESSMENT

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Please see the Department's website:

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=8938](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8938)



## APPENDIX B: SUBMISSIONS

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Please see the Department's website:

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=8938](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8938)

## APPENDIX C: RESPONSE TO SUBMISSIONS

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Please see the Department's website:

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=8938](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8938)

## APPENDIX D: NOTICE OF MODIFICATION

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Please see the Department's website:

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=8938](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8938)



## **APPENDIX E: CONSOLIDATED APPROVAL**

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Please see the Department's website:

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=8938](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8938)