

22 January 2014

Steve O'Donoghue

 Department of Planning and Infrastructure
 via email

Re: Cobbora Offset Areas

Dear Steve,

On the 20 January 2014, you requested that EMM provide an updated table with the area of each vegetation type in each offset, that is, an updated version of Table 2.5 in the Biodiversity Offset Package (BOP) (12 August 2013). The requested table is provided below.

Table 1 Vegetation types in each offset site

Vegetation type	Offset area (ha)						Total
	Adelyne NPWS addition	Cobbora NPWS addition	Eastern link areas	Goonoo NPWS addition	Sth NPWS addition	Zieria patch	
CW107 Black Cypress Pine - Narrow-leaved Stringybark Heathy Woodland	0	246	76	59	125	0	506
CW111 Blakely's Red Gum Rough-barked Apple Flats Woodland	43	327	53	215	82	0	720
CW112 Blakely's Red Gum - Yellow Box Grassy Woodland	0	6	1	122	77	0	207
CW112 Blakely's Red Gum - Yellow Box Grassy Woodland - DNG	0	28	0	0	82	0	110
CW115 Blue-leaved Ironbark Woodland	209	938	253	1,495	478	39	3,411
CW115 Blue-leaved Ironbark Woodland - regrowth		51	68	80	77		277
CW133 Dwyer's Red Gum - Currawang Grassy Mid-high Woodland	34	224	12	317	6	4	595
CW138 Fuzzy Box Woodland on Alluvial Plains	0	0	0	45	0	0	45
CW145 Inland Grey Box Tall Grassy Woodland	66	41	35	30	24	0	195
CW155 Mugga Ironbark - Inland Grey Box - Pine Tall Woodland	0	0	38	5	43	0	87
CW156 Mugga Ironbark - Inland Grey Box Shrubby Woodland	0	0	1	256	29	0	287
CW160 Narrow-leaf Ironbark	0	0	0	112	0	0	112
CW176 Red Stringybark - Scribbly Gum - Red Box - Long-leaved Box Shrub - Tussock Grass Open Forest	9	32	0	0	16	0	57
CW177 Red Stringybark Woodland	26	236	145	207	246	0	860
CW191 Slaty Gum Woodland	0	0	115	0	51	0	166
CW202 Tumbledown Red Gum - Black Cypress Pine - Red Box Low Woodland	0	0	0	0	14	0	14
CW213 White Box - White Cypress Pine - Inland Grey Box Woodland	0	0	0	0	17	0	17
CW268 Mugga Ironbark - Blakely's Red Gum woodland	0	0	0	267	0	0	267
Native pasture	26	153	78	27	610	0	894
Total	413	2,281	875	3,238	1,977	43	8,827
Total woodland	387	2,100	797	3,210	1,285	43	7,822
Total Box Gum Woodland DNG	0	28	0	0	82	0	110

In the process of preparing this table, it became apparent that the distribution of vegetation types between each of the offset areas provided in our letter of 15 January 2014 was incorrect. Corrected versions of the tables for use in the draft conditions are also provided below (Table 2 and Table 3).

Table 2 Summary of the Biodiversity Offset Strategy

Offset area	Offset type	Minimum offset area (ha)
Group 1- Formal Biodiversity offset areas		
Southern NPWS additions	Enhance existing native woodland (1,285 ha) [15 January 2014 letter: 1,371] Regenerate: 82 ha of Blakely's Red Gum - Yellow Box grassy woodland of the NSW South Western Slopes Bioregion EEC derived native grassland; and 610 ha of low condition native pasture to native woodland to provide habitat for threatened species impacted by the project¹ [15 January 2014 letter: 293]	1,977 [15 January 2014 letter: 1,746]
Eastern Link areas	Enhance existing native woodland (797 ha) Regenerate 78 ha of low condition native pasture to native woodland to provide habitat for threatened species impacted by the project ¹	875
Zieria Patch	Enhance existing native woodland (43 ha)	43
Cobbora SCA additions	Enhance existing native woodland (2,100 ha) Regenerate: 28 ha of Blakely's Red Gum - Yellow Box grassy woodland of the NSW South Western Slopes Bioregion EEC derived native grassland; and 153 ha of low condition native pasture to native woodland to provide habitat for threatened species impacted by the project¹ [15 January 2014 letter: 219]	2,281 [15 January 2014 letter: 2,349]
Adelyne additions	Enhance existing native woodland (387 ha) Regenerate 26 ha of low condition native pasture to native woodland to provide habitat for threatened species impacted by the project ¹	413
Goonoo additions	Enhance existing native woodland (3,210 ha) [15 January 2014 letter: 3,226] Regenerate 27 ha of low condition native pasture to native woodland to provide habitat for threatened species impacted by the project ¹ [15 January 2014 letter: 79]	3,238 [15 January 2014 letter: 3,305]
Group 2: Additional areas to the formal biodiversity offset properties to provide biodiversity conservation outcomes		
Rehabilitation area	Rehabilitate to woodland vegetation communities and provide habitat for threatened species impacted by the project	1,916
Northern Restoration area	Regenerate 185 ha of low condition native pasture to native woodland to provide habitat for threatened species impacted by the project ¹	185

Note: **Bold** – minor GIS amendment (rounding uncertainty) <2ha.

1. These areas require further survey effort to define the condition, class and level of disturbance. Therefore, the areas defined as low condition native pasture may be varied once the further survey effort is carried out.

Table 3 Lots containing biodiversity offsets

Property/offset area	Minimum offset area (ha)
Southern NPWS additions	1,977
Lot 2 and 3-839623, Lot 3-1112933, Lot 2-1112933, Lot 3-802679, Lot 88-750780, Lot 1-1072945, Lots 78 and 79-750751, Lots 46, 48 and 49-754329, Lot 2-1072945, Lot 45-754329, part Lot 115-721236, and part Lots 16, 17, 25, 26-754329.	
Eastern link areas	875
Lots 20, 21 and 23-754329, Lot 9-130575, Part Lot 31-754329, Lot 102-754334, Part Lot 30-754329, part Lot 2 and part 3-586911, and part Lot 141-721256.	
Zieria patch	43
Part Lot 36-754289 and part Lot 44-754289.	
Cobbora SCA additions	2,281
Lot 45-720311, Lot 42-257240 and Lot 18-754312.	
Adelyne additions	413
Lot 35-754326.	
Goonoo additions	3,238
Lot 3-754325, Lot 39-754330, Lot 36-754330, Lot 17-754293 and Lot 9-721223	
Total	8,827

Compared to the values provided on 15 January 2014, the minimum offset area that will be provided in the Southern NPWS additions are 231 ha higher and the Cobbora SCA additions and the Goonoo additions are 68 ha and 67 ha lower, respectively. Overall, the total proposed offset area is 96 ha higher than indicated in our previous letter.

The offset package has developed over the last 18 months. The previous inconsistencies in the reported offset area values arose from the multiple incremental changes to the calculations. The information provided in this letter has been taken directly from the project GIS (ie starting afresh) and the resulting numbers have been cross-checked to ensure they carry through each of the tables.

The Biobanking and EPBC Act offset calculation outcomes described in the BOP are improved as a result of the changes. The offset ratios are provided in Table 4.

Table 4 Updated offset ratios

Vegetation type	Offset to impact ratio reported in the BOP (August 2013)	Current offset package (22 January 2014)		
		Project area (ha)	Offset area (ha)	Offset to impact ratio
Box Gum Woodland EEC (includes DNG)	8.4:1	119	1,054	8.9:1
Inland Grey Box Woodland EEC (includes DNG)	2.5:1	79	195	2.5:1
Fuzzy Box Woodland EEC (includes DNG)	2.1:1	18	45	2.5:1
Sub-total TECs	5.7:1	216	1,294	6:1
Other woodland vegetation	3.8:1	1,695	6,639	3.9:1
Total woodland and DNG	4:1	1,911	7,934	4.2:1

Notes: Updated Table 4.1 in the BOP.

Yours sincerely,



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