Aurecon Australasia Pty Ltd

ABN 54 005 139 873 Level 5, 116 Military Road Neutral Bay NSW 2089 PO Box 538 Neutral Bay NSW 2089 Australia

.com



Memorandum

То		From			
Сору		Reference	EST04585 and 04586		
Date	2021-09-16	Pages (including this page)	4		
Subject	OutputOutpu				

1.1 Purpose

To review the changes in impact area identified at Mudies Creek and Doughboy Hollow Creek in order to accommodate construction of the respective bridges and consider any further implications as outcomes of the adjusted areas.

1.2 Summary of Changes

The Singleton EST04585 and EST04586 ecological assessment report (Rev2 2020-20-15) identifies the following TEC's be removed allowing for implementation of the Mudies Creek and Doughboy Hollow Creek bridges. However, adjustments are required to the area of the TEC's impact in order to accommodate bridges construction. These adjustments are identified in the table below and further identified in **Figure 1** and **Figure 2**:

Table 1 TEC Impact Area's

TEC Impacted	Conservation Status under the EPBC Act	Initial Impacted Area	Adjusted Impact Area accommodation construction
Coast Swamp Oak (<i>Casuarina glauca</i>) Forest of the New South Wales and South East Queensland ecological community	EN	Up to 0.0748 ha	Up to 0.1380 ha
Central Hunter Valley eucalypt forest and woodland	CE	Up to 0.0014 ha	Up to 0.0110 ha

aurecon

As a result of these adjustments further changes are thus required in the following sections of the attached Singleton EST04585 and EST04586 ecological assessment report, as documented in the table below:

Table 2 EST04585 and EST04586 ecological assessment report adjustments

Section Identification	Current Version	Revised Version
Section 5.4, Table 5.2, row 2, column 2, paragraph 2, sentence 1.	The total areas of PCT 1800 cleared will be 0.0748 ha whilst the total estimated area of EPBC listed Swam Oak forest is estimated to be 31 950 ha.	The total areas of PCT 1800 cleared will be 0.1380 ha whilst the total estimated area of EPBC listed Swam Oak forest is estimated to be 31 950 ha.
Section 5.4, Table 5.2, row 3, column 2, paragraph 2, sentence 1.	The total area of PCT 1604 cleared will be 0.0014 hectares.	The total area of PCT 1604 cleared will be 0.0110 hectares.

1.3 Conclusion

The additional broader areas were surveyed by two Aurecon ecologists Liam Stephen and Sarah Glauert whilst undertaking the field assessments. The extended area bodes no further impacts to the assessment significance outcomes, with the mitigation measures identified in section 6.2 of the attached Singleton EST04585 and EST04586 ecological assessment remaining applicable to the activity.

In summary, the works will result in the removal of 0.149 ha of EPBC Act listed communities. Due to the limited and localised extent of impact, it is unlikely that any listed TECs or threatened species will be significantly impacted by the works.

Through the application of recommended mitigation measures identified in Section 6.2 of the report, along with appropriate standard environmental controls through the construction phase, impacts to biodiversity are likely to be minimised.

aurecon

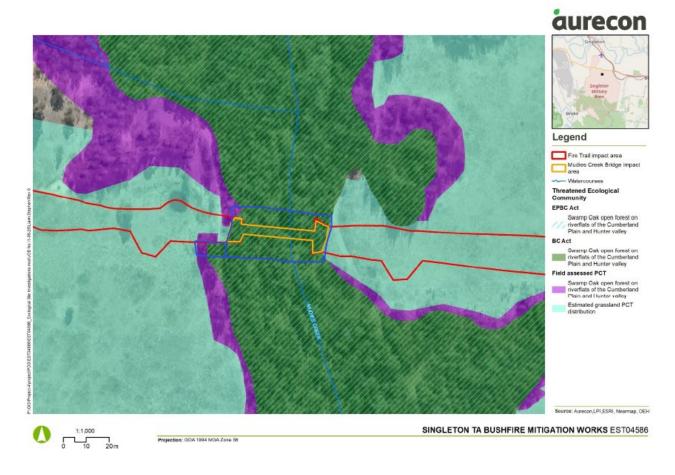


Figure 1 Adjusted Mudies Creek Bridge Impact Area (blue outline)

aurecon

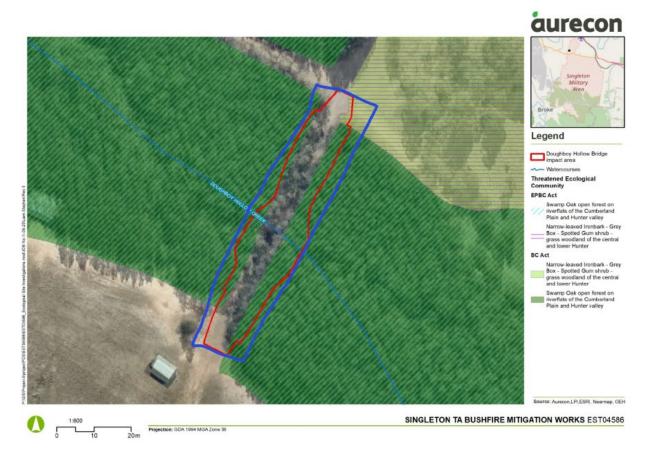


Figure 2 Adjusted Doughboys Hollow Creek Bridge Impact Area (blue outline)