Roads and Traffic Authority

Pacific Highway Upgrade -Oxley Highway to Kempsey Flora and Fauna Working Paper September 2010

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Executive summary

As part of the Pacific Highway Upgrade Program, the NSW Roads and Traffic Authority (RTA) proposes to upgrade the Pacific Highway between the Oxley Highway and Kempsey ('the Proposal'). This report details the terrestrial and aquatic ecological assessment of the impact of the Proposal.

In order to determine those threatened species, populations and endangered ecological communities that may be present within the study area, a combination of literature review and habitat assessment was undertaken. Following this a series of field surveys was undertaken in order to compile a list of species present and prepare vegetation mapping for the study area. The results of the field surveys assisted in assessing the potential impacts of the Proposal on threatened species, populations and endangered ecological communities.

The study area was found to contain a range of habitats including low-lying floodplains, riparian zones and drier sclerophyll forest on hilltops in more undulating terrain. Approximately one third of the study area was found to consist of cleared land, with the bulk of the remainder occupied by native vegetation. Most of the native vegetation within the study area is contained in state forests and nature reserves, though some occurs on private land. During the field surveys, 18 threatened fauna species and four endangered ecological communities were recorded within the study area, as well as one threatened flora species possibly recorded. Additional threatened flora and fauna species have potential to occur, based on the availability of suitable habitat.

An assessment of impact on those threatened species and endangered ecological communities recorded or with potential to occur within the study area has been undertaken in accordance with Part 3A of the *Environmental Planning and Assessment Act 1979*. The significance assessments have concluded that there is unlikely to be a significant impact on threatened species or ecological communities provided that proposed mitigation and management measures are developed and implemented. Appropriate mitigation would be particularly important to minimise impacts on local populations of the koala, green-thighed frog and giant-barred frog, which have been identified as species' particularly vulnerable to potential impacts associated with the Proposal.

There is the potential for a number of direct and indirect impacts to occur on biodiversity values as a consequence of the Proposal. While many of these impacts have either been avoided or minimised through route option selection and design development or could be adequately mitigated or managed, there are some impacts that could not be adequately mitigated. To address these residual impacts of the Proposal, the RTA would implement a comprehensive offset strategy and package that would be developed in consultation with the Department of Environment, Climate Change and Water and Department of Industry and Investment. This strategy would complement the specific mitigation measures incorporated into the Proposal and would be implemented during the construction and operational phases to further mitigate residual impacts and contribute to the maintenance and improvement of local and regional biodiversity values.

On the basis of the assessments undertaken in this report, it is concluded that the proposed development is unlikely to result in a significant impact on any Matters of National Environmental Significance as defined under the *Environment Protection and Biodiversity Conservation Act 1999*.