1. INTRODUCTION

The City of Ryde commissioned Bewsher Consulting in 2007 to assist its Floodplain Risk Management Committee in preparing a Flood Study and Floodplain Risk Management Study and Plan for Macquarie Park.

The study area consists of the Lane Cove River from its confluence with Terrys Creek downstream to 1.5 kilometres below Fullers Bridge (with a particular focus on the reach below Fullers bridge) and a series of relatively small and mostly developed catchments which drain in either a northeasterly or easterly direction to the river, as shown in **Figure 1**. Apart from Macquarie Park itself, the study area includes parts of the suburbs of Marsfield, North Ryde, Denistone East and Chatswood West.

Apart from drainage assets associated with Macquarie University, Epping Road, Lane Cove Road and the M2 Motorway, all of the stormwater drainage infrastructure is owned by Council.

Council's Floodplain Risk Management Committee has been charged with overseeing the preparation of the Study and Plan. The Committee is comprised of a number of local community and business representatives, Councillors and officers from the City of Ryde and representatives from the Department of Environment Climate Change and Water, the Transport Infrastructure Development Corporation and the State Emergency Service.

This report provides a description of the establishment of a computer model of flood behaviour throughout the study area. This model becomes the primary tool for assessing both the existing flood behaviour and the changes which may occur through the implementation of any flood mitigation options that may be proposed during the course of the study.