Title

Eastwood & Terrys Creek Floodplain Risk Management Study & Plan Flood Study Report

Abstract The study area includes that portion of Terrys Creek within the City of Ryde from Terry Road to the creek's confluence with the Lane Cove River. In addition, as shown in Figure 1, it includes all significant tributaries of Terrys Creek.

This report provides a description of the establishment and calibration of a computer model of flood behaviour throughout the study area. This model will become 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.

Catchment Areas

For the purposes of Council's management of the stormwater systems within the City of Ryde, the Terrys Creek catchment has been traditionally divided into the Eastwood and Terrys Creek drainage subcatchments.

The Ryde component of the Eastwood subcatchment is about 169 hectares in area and extends from the intersection of Marsden Road and Terry Road to Blaxland Rd, Eastwood. The Terrys Creek subcatchment comprises an area of about 326 hectares and extends from the intersection of Blaxland Road and Kings Road to the Lane Cove River.

The upstream portion of Terrys Creek (within Parramatta City Council) has an estimated area of 160 hectares, while the remaining portion of the catchment (within Hornsby Shire Council) has an estimated area of 357 hectares. The estimated total area of Terrys Creek is therefore approximately 1012 hectares.

The Eastwood town centre is located within the Eastwood subcatchment, and straddles the Main Northern Railway Line (Figures 1 and 2). The railway embankment divides the Eastwood town centre into eastern and western halves.

Models

The DRAINS software has been used to model the hydrologic regime of the Terrys Creek catchment to its confluence with the Lane Cove River (see Figure 2). DRAINS is a comprehensive hydrologic modelling program for designing and analysing various types of catchments and urban stormwater drainage systems. It also includes some hydraulic modelling capabilities for pipes and overland flowpaths. It was first released in January 1998 and is marketed by Watercom Pty Ltd. The software is widely used in Australia and Council itself has used DRAINS for many years.

Following various discussions with Council officers, the widely used and Australian developed TUFLOW model (Reference 9) was chosen as the principal hydraulic modelling tool for use in the study. There were seen to be numerous advantages of using a sophisticated two-dimensional (2D) model such as TUFLOW for simulating flood conditions within Terrys Creek and its tributaries. These advantages included not only the model's ability to simulate flood flows along a complicated network of overland flowpaths such as occurs in the study area, but also the ability of the model to produce figures to aid community understanding and acceptance of the flood study results. The technical description of the TUFLOW model and its specific application to Terrys Creek is provided in Appendix B.

Resource locator

Eastwood &
Terrys Creek -
Floodplain RiskName: Eastwood & Terrys Creek - Floodplain Risk Management Study & Plan - Flood
Study Report October 2009Management
Study & Plan -
Flood Study
Report OctoberProtocol: WWW:DOWNLOAD-1.0-http--downloadFlood Study
Report October
2009Function: download

Unique resource identifier

Code	d81ba4t4-021d-4223-8tat-5b20928d85aa	
Presentation form		
Edition	27/06/2017	
Dataset language	English	
Metadata standard		
Name	ISO 19115	
Edition	2016	
Dataset URI	https://datasets.seed.nsw.gov.au/dataset/d81ba4f4-021d-4223-8faf-5b20928d85aa	
Purpose	Land and Resource Management	
Status	On going	
Spatial representation		
Туре	vector	
Spatial reference system		
Code identifying the spatial reference system	4283	
Topic category		

Keyword set	
keyword value	
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16
Geographic location	
West bounding longitude	151.066337
East bounding longitude	151.109594
North bounding latitude	-33.797827
South bounding latitude	-33.761277
NSW Place Name	Eastwood
Vertical extent information	
Minimum value	-100
Maximum value	2228
Coordinate reference system	
Authority code	urn:ogc:def:cs:EPSG::
Code identifying the coordinate reference system	5711
Temporal extent	
Begin position	
End position	N/A
Dataset reference date	
Resource maintenance	
Maintenance and update frequency	As needed
Contact info	
Contact position	Data Broker
Organisation name	Ryde City Council
Full postal address	cityofryde@ryde.nsw.gov.au
Email address	cityofryde@ryde.nsw.gov.au
	pointOfContact

Responsible party			
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Responsible party role	pointOfContact		
Metadata point of contact			
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Email address	<u>cityofryde@ryde.nsw.gov.au</u>		
Responsible party role	pointOfContact		
Metadata date	2024-03-25T05:14:41.473736		
Metadata language			