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

Unique resource identifier

Code	d81ba4f4-021d-4223-8faf-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	
Type	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
Responsible party role	pointOfContact

Limitations on public access

Responsible party

Contact position	Data Broker
Organisation name	Ryde City Council
Full postal address	cityofryde@ryde.nsw.gov.au
Email address	cityofryde@ryde.nsw.gov.au
Responsible party role	pointOfContact

Metadata point of contact

Contact position	Data Broker
Organisation name	Ryde City Council
Full postal address	cityofryde@ryde.nsw.gov.au
Email address	cityofryde@ryde.nsw.gov.au
Responsible party role	pointOfContact

Metadata date

2024-03-25T05:14:41.473736

Metadata language