Title Upper Parramatta River Catchment Floodplain Risk Management Study

Abstract

THE STUDY AREA

The Upper Parramatta River catchment covers an area of 110 square kilometres and covers all land that drains to the Parramatta River upstream of its tidal limit at the Charles Street Weir, between the Barry Wilde Bridge (Wilde Avenue) and the Gasworks Bridge (Macarthur Street). Most of the catchment is urbanised and has a population of more than 230,000. However, there are significant areas of urban bushland, generally located along the major watercourses.

A map of the study area is presented as Figure 1.1. The Upper Parramatta River has a number of tributaries that flow into it within the study area. The two largest tributaries are Toongabbie Creek and Darling Mills Creek. Other tributaries include the following:

- Brickfield Creek;
- Domain Creek;
- Finlaysons Creek;
- Coopers Creek;
- Pendle Creek (also known as Pendle Hill Creek);
- Greystanes Creek (also known as Girraween Creek);
- Grantham Creek;
- Blacktown Creek;
- Lalor Creek;
- Quarry Creek;
- The Quarry Branch (also known as Northmead Gully);
- Excelsior Creek;
- Blue Gum Creek;
- Rifle Range Creek;
- Hunts Creek.

The Upper Parramatta River catchment includes parts of the following four local government areas (LGAs):

- Shire of Baulkham Hills — including the suburbs of Oatlands, Carlingford, North Rocks, Northmead, North Parramatta, West Pennant Hills, Castle Hill and Baulkham Hills;
- City of Blacktown — including the suburbs of Toongabbie, Seven Hills, Prospect, Blacktown, Lalor Park and Kings Langley;
- City of Holroyd — including the suburbs of Westmead, Wentworthville, South Wentworthville, Greystanes, Pendle Hill, Girraween, Prospect, Toongabbie and Merrylands West;
- City of Parramatta — including the suburbs of Parramatta, North Parramatta, Westmead, Northmead, Wentworthville, Toongabbie, Old Toongabbie and Winston Hills.

OBJECTIVES OF THIS STUDY

The primary objective of the current Upper Parramatta River Floodplain Risk Management Study and Plan is to bring together, and place in appropriate context, all past, current and proposed future activities related to the reduction of flood risk in the catchment. In broad terms, the current study has investigated what can be done to minimise the effects of flooding in the Upper Parramatta River catchment and recommended a strategy in the form of a Floodplain Risk Management Plan. As mentioned above, despite the expenditure of more than $35 million on flood mitigation works and measures since 1989, none of the four councils within the area of the Trust have adopted a formal Floodplain Risk Management Plan as required by the New South Wales (NSW) Government's Flood Prone Land Policy. This study and plan constitute key components of the NSW Government's floodplain risk management process as outlined in the Floodplain Management Manual (NSW Government, 2001) (see Section 1.4).

Some of the objectives of the study include:

- briefly outlining the hydrological and hydraulic modelling activities that have been undertaken for the catchment to date;
- briefly reviewing the past, current and future flood-related activities of the Trust and the four constituent Councils;
- reviewing, in detail, issues relating to planning and development controls within the catchment's floodplains;
- identifying additional floodplain risk management measures that particularly

relate to community awareness about flooding, the release of flood-related information to the community, flood warning and emergency management;
- developing a mutually agreeable Floodplain Risk Management Plan for the Upper Parramatta River catchment that outlines the best measures to reduce flood damage, based on environmental, social, economic, financial and engineering considerations.

Report

The structure of this report is as follows:

Chapter 2 summarises the flood problems, together with the behaviour and impacts of flooding in the Upper Parramatta River catchment. Chapter 2 also discusses the modelling of flood flows and flood levels in the catchment;

Chapter 3 provides an overview of the previous flood-related studies and investigations that have been undertaken in the catchment, together with an outline of the available mapping and survey that has been carried out;

Chapter 4 presents an overview of floodplain risk management measures available for dealing with flood problems generally and the methodology used to assess these management measures in the current study. The large number of floodplain risk management measures that have already examined and implemented in the catchment are also listed in this chapter;

Chapter 5 discusses possible future floodplain risk management options for the Upper Parramatta River catchment, particularly flood-related planning and development controls, community awareness about flooding, the release of floodrelated information to the community, flood warning and emergency management;

Chapter 6 lists all the documents referenced in this study;

Chapter 7 provides a bibliography of all studies and investigations that have been undertaken in the catchment since the early 1970s;

Chapter 8 provides a glossary of terms used in this study.

Resource locator

Upper Parramatta River Catchment - Floodplain Risk Management Plan Vol 1 Study Report	Name: Upper Parramatta River Catchment - Floodplain Risk Management Plan Vol 1 Study Report Protocol: WWW:DOWNLOAD-1.0-http--download Function: download
Upper Parramatta River Catchment - Floodplain Risk Management Plan Vol 2 Planning Issues & Outcomes	Name: Upper Parramatta River Catchment - Floodplain Risk Management Plan Vol 2 Planning Issues & Outcomes Protocol: WWW:DOWNLOAD-1.0-http--download Function: download
Upper Parramatta River Catchment - Floodplain Risk Management Plan Vol 3	Name: Upper Parramatta River Catchment - Floodplain Risk Management Plan Vol 3 Protocol: WWW:DOWNLOAD-1.0-http--download Function: download
Upper Parramatta	

Upper Parramatta River Catchment - Floodplain Risk Management Plan Appendices A,B&F	Name: Upper Parramatta River Catchment - Floodplain Risk Management Plan Appendices A,B&F Protocol: WWW:DOWNLOAD-1.0-http--download Function: download

Unique resource identifier

Code	d07dfc16-6e01-4fde-a123-925669d5a2f1

Presentation form

Edition

25/07/2017

Dataset language

English

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Edition	2016

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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	150.915894
East bounding longitude	151.051427
North bounding latitude	-33.82695
South bounding latitude	-33.730667
NSW Place Name	Upper Parramatta River Catchment
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	City Of Parramatta Council
Full postal address	council@cityofparramatta.nsw.gov.au
Email address	council@cityofparramatta.nsw.gov.au
Responsible party role	pointOfContact
Limitations on public access	

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