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

<u>Upper</u>

Parramatta

River Catchment - Name: Upper Parramatta River Catchment - Floodplain Risk Management Plan Vol 1

Study Report

Floodplain Risk

Management Plan Vol 1

Study Report

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

Protocol: WWW:DOWNLOAD-1.0-http--download

Protocol: WWW:DOWNLOAD-1.0-http--download

Function: download

<u>Upper</u> **Parramatta**

River

Name: Upper Parramatta River Catchment - Floodplain Risk Management Plan Vol 3

Catchment -Floodplain Risk

Management

Plan Vol 3

Function: download

Upper Parramatta River Catchment -Floodplain Risk Name: Upper Parramatta River Catchment - Floodplain Risk Management Plan Appendices A,B&F

Protocol: WWW:DOWNLOAD-1.0-http--download

Management
Plan
Appendices

A,B&F

Function: download

Unique resource identifier

Code

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

Presentation

form

Edition

25/07/2017

Dataset language

English

Metadata standard

Name

ISO 19115

Edition

2016

Dataset URI

https://datasets.seed.nsw.gov.au/dataset/d07dfc16-6e01-4fde-a123-925669d5a2f1

Purpose

Land and Resource Management

Status

On going

Spatial representation

Туре

vector

Spatial reference system

Code

identifying the

spatial

4283

reference system

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 |

Responsible party 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 Metadata point of contact **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

point Of Contact

2024-03-25T07:19:22.220482

Responsible party role

Metadata language

Metadata date