### WATER QUALITY AND WATER QUANTITY CODE

### 1 Purpose

The purpose of the code is to provide direction for stormwater management so that development does not have a negative impact on waterways or wetlands in terms of:

- water quality;
- structural stability of soils and waterway banks;
- hydraulic capacity; and
- environmental and ecological values;

## 2 Application of the Code

For code assessable development, the code for assessment consists of the secondary code(s) listed below:

- Biodiversity / Nature Conservation Code; and
- Flood Prone Land Code.

#### 3 Definitions

Waterway: As defined in section 3.7 of this planning scheme.

Waterway As defined in section 3.7 of this planning scheme.

Corridors:

Waterway As defined in section 3.7 of this planning scheme.

Management

Plans:

Wetlands: As defined in section 3.7 of this planning scheme.

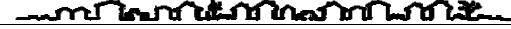
#### 4 Explanation

This code applies standards for storm water management, so that water quality in the City is managed to acceptable standards. The code also provides assessment criteria for managing stormwater quantity.

### 5 Performance Criteria and Acceptable Solutions

Performance Criteria Stormwater Quality and Impact		Acceptable Solutions
P1 The volume or frequency of stormwater discharges for a development is not to  (a) degrade natural waterway or wetland ecology; or  (b) adversely affect the wetting or drying regime of a wetland; or  (c) use a point discharge to a waterway or wetland that	A1	The development does not discharge stormwater directly into a waterway or a wetland or into a waterway corridor.





P2	has any potential to cause erosion or a degraded environment at the point of discharge.  Development maintains the natural values of waterways	A2	No Acceptable Solution specified.
	and wetlands.		
P3	Development manages the discharge of stormwater from the site to prevent any increase in waterborne pollutants in waterways caused by development within the city's boundaries¹ by doing the following;  (a) using stormwater treatment / conveyance mechanisms (such as sedimentation ponds), that are based on the results of modelling site runoff for a range of storm events and estimated pollutant loads²; and  (b) using treatment facilities for water pollutants that are based on the expected types and volumes of pollutants likely to be generated from the development (eg. floatable litter, organic matter, sediment); and  (c) ensuring that treated stormwater from the development is of the same or better water quality than pre-development runoff; and  (d) using a site based Stormwater Management Plan for all stormwater management measures in the proposal; and  (e) wherever scientifically possible; using water pollution control ponds or wetlands for the final treatment of stormwater before discharge to the	A3	No Acceptable Solution specified.

<sup>&</sup>lt;sup>1</sup> The design of the water pollution minimisation system must be undertaken and certified by properly qualified personnel using recognised and locally accepted hydrological, hydraulic, hydrogeological, soils, water quality and biological data and design methodologies;

<sup>&</sup>lt;sup>2</sup> The storm events and pollutant loads to be used in modelling would need to be confirmed by the Council before the modelling occurred.





- wider environment that are sited where they will have minimal impact on the natural environment; and
- (f) having the 'First Flush' diversion treatment or systems for 30mm of rainfall developed (where scientifically possible) for the initial treatment of stormwater as part of the stormwater management system that are sited to minimise impacts on the natural environment; and
- (g)using water quality criteria in accordance with 'fitness use' requirements applied to all stormwater diverted under ground to recharge aquifers; and
- (h) developing and implementing water а quality monitoring regime having regard to the site and the proposed development.

### Water Quality

- P4 The water quality of the Fitzroy River and other waterways is protected by the use of; (a) buffers;
  - (b) vegetation protection; and (c)revegetation of waterway corridors.
- In Partial Satisfaction of P4
- Development and use of land adjoining A4.1 the full supply level above the Barrage includes the provision of an effective buffer that assists in filtering runoff, includina:
  - (i) A buffer distance of 100 metres to the water supply level of the barrage, which excludes cropping or grazing of a low intensity nature; and
  - (ii) Fencing and water troughs are installed on the land to prevent encroachment of animals within 100m of the full supply level above the barrage.

## A4.2

Α5

#### AND

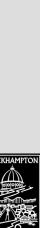
Within waterway corridors, development is carried out in accordance with Performance Criteria P2, P3 and P4 in the Biodiversity / Nature Conservation Code.

### **Sediment Controls for Development**

- **P5** Development incorporates erosion and sediment control mechanisms during construction so that site runoff does not increase sediment







load to waterways including the Fitzroy River, based on the following;

- (a) having uncontaminated upslope runoff diverted around areas to be disturbed using catch drains that disperse runoff to a legal point of discharge; and
- (b) having unvegetated areas that:
  - (1) are a result of landdisturbing activities, or
  - (2) are subject to continued accelerated erosion, or
  - (3) could cause environmental harm from sedimentation;

provided with ground cover or other protective measures, structures or devices sufficient to restrain accelerated erosion and control off-site sedimentation; and

(c) having an Erosion and Sediment Control Program developed in accordance with the Capricorn Municipal Development Manual.

