

Information Guide - Stormwater Disposal from Private, Commercial and Industrial Properties

PURPOSE:

To provide guidelines to Developers, the Community and City Development officers of the minimum requirements for the disposal of stormwater from private properties as required by Planning, Building and Local Law, schemes, policies and regulations.

OBJECTIVE:

To prevent increased stormwater run-off entering Council's drainage system and impacting on its performance during various rain events.

To ensure any permitted connections to the Council drainage system discharge stormwater at a rate and quality that will not impact environmentally on the receiving water body.

GUIDELINES:

All land owners or occupiers of a lot are required to contain stormwater within the lot as outlined under section 9.1 of the City of Bunbury, "Private Property Local Law". (A copy of the Local Laws can be found on the City of Bunbury website).

Typically soils within the City of Bunbury have the ability to store and infiltration stormwater captured within the lot boundary from average rainfall events.

Dedicated stormwater storage infrastructure is required for residential development (including single dwellings, group dwellings, strata lots, etc) when:

The lot size is less than 400m² or

The impervious area of the site exceeds 250m² (Impervious areas include surfaces such as roofs, asphalt, paving and concrete). Note exemptions to this requirement may be granted if the lot is greater than 2000m².

For commercial and industrial developments all stormwater runoff is to be managed within the lot with an approved overland flow path for stormwater when storage requirements are exceeded.

The amount of storage to be provided is calculated on the 1 year / 1 hour rainfall event.

For residential lot(s) stormwater runoff shall be contained onsite within storage infrastructure at the rate of 1.0 cubic metres of storage for each 65m² of impervious area.

For Commercial and Industrial Development's, stormwater shall be contained at the following rates:

1.0 cubic metres of storage for each 65m² of impervious area.

An additional 1m³ per 65m² of impervious area shall be provided in areas of clayey or silty soils, high groundwater table areas, and/or where the total impervious area of the site exceeds 1500m². This storage can be provided above ground, contained within shaped carpark or driveway areas.

The storage rates outlined above is Council's minimum requirement. If individual site conditions warrant additional stormwater management treatments to ensure compliance with The City of Bunbury Local Law 9.1 "Containment of Stormwater", this is the land owner's responsibility.

There are many different methods as to how stormwater can be retained / stored on-site. The most common method is via the use of soakwells, however it should be noted that there are other alternatives to soakwells which if implemented and maintained can retain and treat the stormwater for removal of pollutants. Another benefit is that these treatments can be incorporated into your landscaping areas and become a feature for the property.

Examples of other alternatives for the retention and management of stormwater at both small and large scale can be located on the Department of Water website, under Managing Water / Urban Water / Water Sensitive Design Brochures

The brochures include:

- Water Sensitive Urban Design: An Introduction.
- Stormwater Design Considerations
- Biofilters
- Constructed Wetlands for Stormwater Management
- Dry or Ephemeral Detention Areas
- Infiltration Basin and Trenches
- Litter and Sediment Traps
- Living Streams
- Pervious Paving
- Rainwater Storage and Reuse Systems
- Swales and Buffer Strips

If developers wish to explore these options further the City would be happy to discuss how to implement these options with developers or their consultants.

Developments with Stormwater Conditions Applied on a Planning Development Approval (DA)

Council requires the submission of stormwater drainage plans for all developments where relevant conditions have been applied as part of a DA process

The applicant shall provide a stormwater drainage plan for approval that contains all information as outlined on the ["Information Guide – Stormwater Drainage Plan"](#).

Overflow Connection to Council Drainage Network

For most developments the Councils requirement is for all stormwater runoff to be managed within the lot boundary, with overland flood routing to the road reserve once storage requirements have been exceeded.

In the CBD Council permits connection to the City's stormwater drainage system with written approval from the Development Engineer.

Outside the CBD Council may allow overflow connection if the capacity of the City's system permits. The owner will need to demonstrate that both the quantity and quality of stormwater satisfies our requirements as outlined in the ["Information Guide – Connection to the City's Drainage Network"](#).

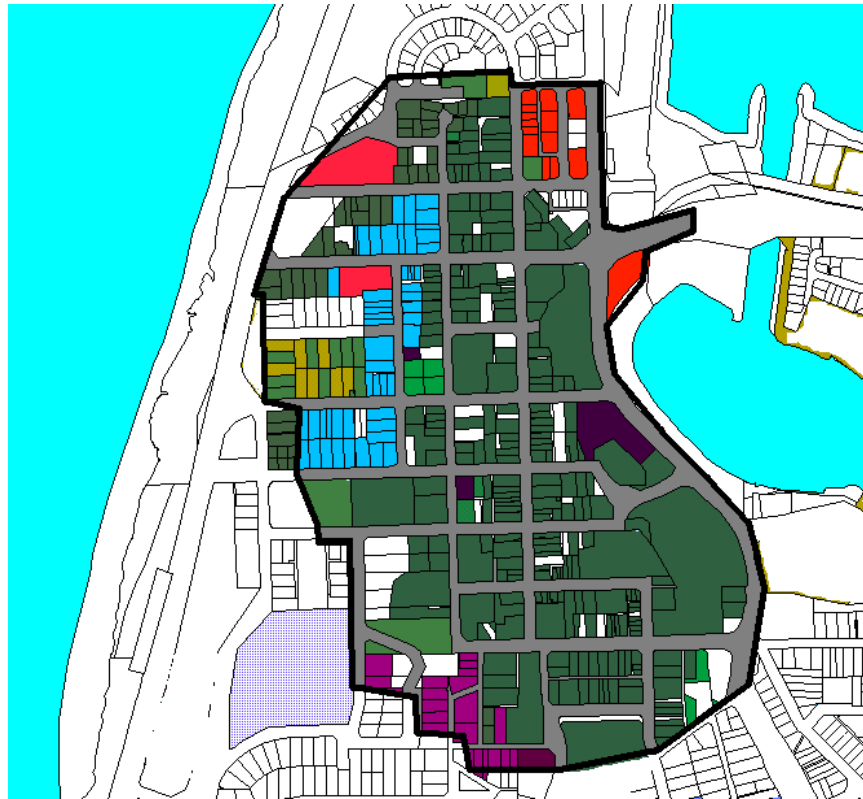
Also the City may require a contribution toward the upgrading, construction or maintenance of the City's stormwater system prior to connection.

Large Developments

Nothing in this guideline shall prevent an applicant carrying out a detailed drainage study that demonstrates drainage of the development by alternative means. Preparation of a drainage management plan shall be in accordance with a brief approved by the Development Engineer and shall be carried out by a professional engineer experienced in drainage design. Recommendations of the drainage plan will be subject to acceptance by the Development Engineer.

Definitions

The CBD area for the purpose of this guideline is as shown below:



CBD Drainage Area