

This guide explains how developers can meet Kingston's best practice stormwater quality requirements.

[Kingston's Integrated Water Cycle Strategy 2012](#) commits Kingston to pursuing best practice urban water performance targets to achieve the [State Environment Protection Policy \(Waters of Victoria\)](#) objectives.

[The Kingston Civil Design Requirements for Developers: Part A – Integrated Stormwater Management 2016](#) is a detailed document that specifies Council's expectations for managing stormwater runoff.

To meet the stormwater quality requirements as outlined in the Civil Design Requirements, stormwater quality treatment systems, such as rain water tanks and raingardens, must be installed on-site in accordance with an approved Stormwater Management Plan, unless otherwise approved.

Council recognises that sometimes an on-site approach can be challenging and considers that an optional financial contribution can be an effective alternative.

How can my development meet best practice stormwater quality requirements?

There are two ways for applicants to achieve best practice stormwater quality requirements:

- The applicant can install stormwater works on-site in accordance with an approved Stormwater Management Plan. The type and complexity of information to be submitted depends on the type and size of the development, as explained within the [Civil Design Requirements](#) document.
- Alternatively, if the applicant prefers not to meet the required best practice stormwater quality management objectives on-site, they can (in most cases) opt to pay Council a nominated stormwater quality financial contribution instead. The in-lieu contribution amount is determined by Council with the payment due prior to the development commencing.

All other stormwater requirements, such as those to reduce the risk of flooding, still remain as per the conditions within the planning permit and must be met.

How is the contribution amount calculated?

The in-lieu contribution charge is based on the total impervious area of the development, such as the area of the roof and paved surfaces. The calculation is based on the average cost of installing stormwater treatment systems on-site across a broad range of differently sized development sites. (This will be reviewed annually).

The calculated contribution is non-negotiable as the developer has the option to meet their obligation by installing the required treatment measures on-site.

In situations where an applicant is proposing to partially meet their stormwater quality obligations on-site, such as installing rainwater tanks, Council will calculate a reduced contribution amount.

More information about the contribution payment is available on Council's website at www.kingston.vic.gov.au/stormwater

What is the planning approval process?

Step 1 – Pre-application consultation

Find out whether a permit is required, what information needs to be provided, and what relevant policies and provisions Council will use to assess the application.

Applicants are encouraged to discuss their proposed stormwater approach at an early stage as Council requirements may influence the proposed site layout and configuration. The site coverage and impervious areas should be minimised as much as practical to reduce stormwater runoff.

Applicants wishing to provide an in-lieu contribution should consider this early in the process so that plans can be adjusted as required.

Step 2 – Submit a Planning Application

It is important to seek advice from the relevant planner and refer to the local planning policies in the [Kingston Planning Scheme](#) that may require specific information to be submitted as part of the application.

Council's Statutory Planning department will assess the application taking into consideration a range of stormwater management requirements. For example:

- a. As a Kingston requirement, **all** residential dwellings must provide a rainwater tank with storage capacity of at least 2,000 litres, which harvests from a roof area of at least 50 square meters, and be connected to internal toilets.
- b. For small scale developments, the provision of appropriately sized rainwater tanks connected to toilets is considered adequate to meet Council's stormwater quality requirements. The option to pay a contribution does not apply to applications with one or two dwellings.
- c. Some applications will need to be formally referred to external agencies such as Melbourne Water if the application is affected by a [Special Building Overlay \(SBO\)](#), [Land Subject to Inundation Overlay \(LSIO\)](#) or [Clause 56 of the Kingston Planning Scheme](#).
- d. For large scale developments, the applicant may be requested to provide an Integrated Water Management Plan (see glossary) as explained within the [Kingston Civil Design Requirements for Developers: Part A – Integrated Stormwater Management 2016](#). Under these circumstances, the applicant is advised to discuss the option of making an in-lieu contribution payment for the stormwater quality component of the report.

Step 3 – Permit Conditions

If Council issues a permit, it will include a number of conditions relating to stormwater management.

In most cases, the applicant will have the option to make a contribution payment instead of installing stormwater quality treatments. All other stormwater requirements, such as those to reduce the risk of flooding, still remain as per the conditions within the planning permit and must be met.

The payment is calculated as follows:

The Net Contribution amount payable = (Gross Contribution) less (Credit) for any rain water tanks or other stormwater treatment measures to be installed onsite.

Worked Example

A 4 unit development is being developed on a 778 sqm site with 70% impervious surfaces.

Each dwelling will be required to install a 2,000 Litre rainwater tank, as a minimum requirement, that will provide a credit that reduces the payment.

Based on STORM / MUSIC modeling, assume that the rainwater tanks achieve 70% of best practice water quality objectives for the site. The payment will be based on the remaining 30% of the site which is untreated.

Using the on-line calculator, an impervious area of 545 sqm results in a Gross contribution amount of \$15,000.

The Net Contribution payable is therefore $\$15,000 \times 30\% = \$4,500$.

Step 4 – Submit engineering drawings for approval

Council's Development Approvals Engineers will assess the submitted documents against the permit conditions and applicable drainage standards.

Where the applicant is proposing to pay the financial contribution details of the impervious area will need to be provided. Any subsequent changes to the impervious area will require a contributions recalculation.

Following the assessment, the applicant will be provided with:

- Details of any modifications required to the treatment measures or requests for additional information.
- Confirmation of the contribution amount (where applicable) and a contribution agreement form to be signed and returned.
- Details of any other fees payable, such as a plan checking fee and construction supervision fee for projects involving Council assets.

The contribution amount will need to be paid in full prior to Council issuing the final letter of approval.

What happens to the contributions?

Council has undertaken research which shows that the most effective way for Kingston to meet its stormwater quality targets, is to construct larger stormwater quality treatment projects throughout the municipality.

At a combined estimated cost of \$27.5M, these larger scale projects have been designed to achieve best practice stormwater treatment targets faster and more cost effectively than smaller projects on private sites.

The collected contributions will be used by Council to fund the full range of costs associated with implementing 31 priority stormwater treatment and reuse projects located around the City of Kingston. This approach is supported by Melbourne Water who recognises the broader community benefits of this approach.

All contribution payments will be accounted for in a specific interest-bearing Reserve Fund, known as the Stormwater Quality Reserve.

Council will regularly monitor, report and review the monies received and expended through existing financial reporting processes.

Example Project

An example of the type of project to be funded by the contribution payments is the recently constructed stormwater treatment and reuse project within the Edithvale Recreation Reserve.

This project incorporates a 800sqm vegetated area and a bio-retention system (shown in the image below) to filter stormwater from a 70 Ha residential catchment.

The system has been specially designed to treat and store more than 1.2 million litres of water in tanks for irrigating the surrounding soccer pitches, baseball field, supply water for flushing toilets in the nearby Council building, and supplement the Council's street tree watering program.



Glossary of References

TITLE	DESCRIPTION
<u>Kingston's Integrated Water Cycle Strategy 2012</u>	<p>This award winning strategy provides an overall direction for the City of Kingston by setting guiding principles and targets for the integrated management of stormwater, potable mains water, wastewater and groundwater.</p> <p>The long term Council target set in the IWCS for stormwater is to provide best practice stormwater treatment for the entire City by 2040 and the community aspiration is to achieve best practice stormwater management from all new impervious areas.</p>
<u>The Kingston Civil Design Requirements for Developers: Part A – Integrated Stormwater Management 2016</u>	<p>A detailed guide for developers that clearly specifies Kingston's expectations for managing stormwater runoff. This includes requirements for small, medium and large scale residential, commercial and industrial planning applications to satisfy their obligations associated with flood management, stormwater treatment and reuse.</p> <p>This document explains the requirements for addressing all aspects of stormwater management including flood management by catering for 1 in 100 year storm events, pipe capacity and on-site detention systems; Water Sensitive Urban Design (WSUD) principles; and stormwater and rainwater reuse for potable water conservation.</p>
Integrated Water Management Plan (IWMP)	<p>A comprehensive report with associated functional drawings that demonstrates how the development meets best practice and satisfies Council's requirements, (including flood management and stormwater quality objectives).</p> <p>A specialist drainage consultant will need to assess the development's performance using software such as STORM or MUSIC.</p>
MUSIC	<p>A software program that models existing catchments and water sensitive urban design solutions to estimate pollutant levels. The acronym stands for 'Model for Urban Stormwater Improvement Conceptualisation'.</p>
STORM	<p>A simplistic calculator used to estimate the benefits of water sensitive urban design solutions for small and medium scale developments.</p>

For further information, contact the City Of Kingston on:

1300 653 356 or info@kingston.vic.gov.au

www.kingston.vic.gov.au/stormwater

This Project has been assisted by the Victorian Government through Melbourne Water Corporation as part of the Living Rivers Stormwater Program

