City of Hobart

Policy

Title: **Stormwater Management Policy for Development**

Category: **Environment, Planning and Development**

Date Last Adopted: 27 May 2024

1. Objectives

To provide a policy that:

- sets out requirements for the management of stormwater that interferes with, or has the potential to interfere with, the operation of the public stormwater system and requires consent under section 14(1) of the *Urban Drainage Act 2013*;
- provides a framework for Council to condition and manage stormwater in new developments, within the context of the Tasmanian Planning Scheme; and
- defines the approach and measures adopted by Council to ensure that stormwater runoff generated by new developments is of an acceptable quality, does not exacerbate flooding, can be accommodated by the public stormwater system, and will not adversely impact the future capacity of the system.

2. Background

The Tasmanian Planning Scheme - Hobart (**TPS**) will not contain specific provisions requiring developments to connect to the public stormwater system nor will it include provisions to assess changes to stormwater quality and stormwater quantity arising from development or sufficiently address the protection of public infrastructure.

In contrast, the Interim Planning Schemes for Southern Councils included a Stormwater Management Code, which was used to assess impacts on the public stormwater system through the assessments of applications for planning permits and to attach conditions to planning permits to manage stormwater impacts. There is no

equivalent code in the State Planning Provisions which will form part of the TPS.

The TPS will include Clause 6.11.2, which is a broad head of power to allow conditions to be applied to planning permits regarding erosion and stormwater volume and quality controls. No additional guidance will be provided in the TPS on what these controls are or how changes in stormwater behaviour resulting from new development are to be assessed or conditioned.

Tasmanian local government practitioners have developed the Tasmanian Stormwater Policy Guidance and Standards for Development to provide guidance around these controls and achieve a consistent state-wide approach to managing stormwater under the Tasmanian Planning Scheme, and to help improve stormwater management while allowing for sustainable development.

The *Urban Drainage Act 2013* provides Council with the power to regulate impacts on the public stormwater system through section 14(1) which requires the General Manager's consent to connect to or interfere with a public stormwater system. All changes to stormwater behaviour resulting from development have the potential to impact or interfere with the Council's public stormwater system.

This policy provides a framework for Council to:

- Ensure that buildings, works, subdivisions and stormwater drainage systems generate stormwater of a quality and quantity that enables protection of natural assets, infrastructure, and properties.
- Ensure pollutant types and/or loadings are managed appropriately to protect natural values, infrastructure, and properties.
- Manage inundation and flood risk to new developments and existing urban areas related to the public stormwater system.
- Ensure overland flow paths convey floodwaters within suitable velocity/depth limits and do not pose a risk to human life or properties.
- Fulfil the requirements of the relevant policies, strategies, and Acts in relation to stormwater management.
- Provide developers and designers with clarity for meeting permit requirements and contributing to best practice stormwater management.
- Ensure public stormwater systems can be managed and maintained appropriately, without causing unnecessary burden to the wider community.

3. Policy

Compliance with Industry Standards

1. Stormwater design in new developments is to be in accordance with the current versions of the industry standard documents *Australian Rainfall and Runoff*, *Australian Runoff Quality*, and the Tasmanian Stormwater Policy Guidance and Standards for Development.

Stormwater System Design Requirements

2. A new or altered major stormwater drainage system shall be designed for the safe conveyance of 1% AEP storm events with an allowance for climate change.

3. A new or upgraded minor stormwater drainage system shall be designed to meet 5% AEP storm events with an allowance for climate change.

4. The allowance for climate change shall be in accordance with the Australian Rainfall and Runoff Data Hub, emissions scenario RCP 8.5, for the year 2090.

5. Any infrastructure (including treatment or detention) to be taken over by the Council must have life-cycle costs, maintenance requirements and an ability to be maintained which are satisfactory to the Council's Manager Waterways.

6. Development, including subdivisions, must facilitate the efficient future provision of expansion of the public stormwater system.

7. Existing waterways must be maintained and enhanced, where possible.

Stormwater Quality Management Requirements

8. The treatment of stormwater is essential to mitigate potential environmental harm due to pollutants and minimising the risk of increased maintenance cost due to sedimentation.

9. The following development is exempt from stormwater quality management requirements in this Policy if any of the following apply:

    (a) a single dwelling on a single lot that will be connected to the existing public stormwater system;

    (b) new impervious area is less than 500m^2, unless:

(i) the property is used for a potentially contaminating activity, as defined in the TPS; or

(ii) a new car park is being created with more than 6 car parking spaces;

(c) a subdivision is for less than or equal to 5 lots;

(d) a subdivision creating new lots greater than 5,000m^2 in area, and with new roads and footpaths less than 500m^2 in area; or

(e) a subdivision which is solely for the purpose of creating road reserve, public open space, public infrastructure, littoral or riparian reserve or minor boundary adjustments.

10. All other new developments must incorporate water sensitive urban design principles for the treatment and disposal of stormwater to meet the Water Quality Treatment Target set by Council as follows:

Target Level	**Water Quality Treatment Target**
1	Site specific requirements at discretion of Council (for example sites with, or draining to, areas with environmental values, potentially contaminating activities etc).
2	(a) 90% reduction in the average annual load of litter/gross pollutants based on typical urban stormwater concentrations; and (b) 80% reduction in the average annual load of total suspended solids (TSS) based on typical urban stormwater TSS concentrations; and (c) 45% reduction in the average annual load of total phosphorus (TP) based on typical urban stormwater TP concentrations; and (d) 45% reduction in the average annual load of total nitrogen (TN) based on typical urban stormwater TN concentrations; and (e) treatment for commercial car parks and service stations must target hydrocarbon removal and fine sediments.

11. Stormwater quality treatment may be offset via a cost contribution, at the discretion of the Council's Manager Waterways. Cost contributions are to be assessed on a case-by-case basis depending on the amount of treatment required for the development, and the location. Cost contributions accepted as an offset do not need to be spent in the same catchment.

12. For staged developments, a staged interim treatment plan is required, along with a master plan for the whole development to the satisfaction of the Council's Manager Waterways. Unless otherwise agreed, treatment will be required for the total development prior to proceeding with more than 50% of the total development.

13. For staged developments, the developer shall maintain all the water sensitive urban design (WSUD) treatment elements until the completion and sealing of the survey diagram for the final stage of the subdivision. Prior to Council taking over all the WSUD treatment elements, the developer is required to demonstrate to Council by providing evidence or documentation, to the satisfaction of Council's Manager Waterways, that all the WSUD treatment elements are in a working condition as designed.

Stormwater Disposal Method Requirements

14. Stormwater must be disposed of by gravity to the public stormwater system where practicable.

15. Where not practicable, stormwater may be disposed of on-site (having regard to the planning zoning of the site, site suitability, the system design and water sensitive urban design principles), collected for re-use, or disposed of to the public stormwater infrastructure via a pump system. A report by a Suitably Qualified Person must be provided demonstrating that the site is suitable for the proposed disposal method, and that the proposed system is designed, and will be maintained and managed, to minimise the risk of failure to the satisfaction of the Manager Waterways.

16. Where stormwater is discharged directly to a watercourse, rivulet or creek the impacts of increased water velocity or volume must be mitigated by adequate capacity energy dissipation to the satisfaction of the Manager Waterways.

Connections to Public Stormwater System

17. Each property will be provided with a single connection point to the public stormwater system, unless there are particular circumstances which require a further connection.

18. Any new or upgraded connections must be either carried out by:

    (a) the property owner or representative after obtaining a road opening permit issued by the Council; or

    (b) the Council, after payment of the applicable fee as published in the Council's Fees and Charges.

19. For each new or upgraded connection, the property owner is responsible for:

    (a) the design of the connection;

    (b) negotiating and compensating easements with affected property owners; and

    (c) surveying and legal work, including for the creation of any easements.

Stormwater Quantity Management Requirements

20. On-site detention systems are generally installed to mitigate the increasing rate of stormwater runoff generated by ongoing development in the City of Hobart catchment area. This ensures that the stormwater discharge does not exceed the capacity of the downstream network to safely convey stormwater and natural runoff.

21. The following development is exempt from stormwater quantity management requirements in this Policy:

    (a) development with less than 100m^2 net increase in the impervious area for the site, and no change of use (except a change of use from single dwelling to multiple dwelling); or

    (b) subdivisions which are not creating new lots with potential for future development (e.g. riparian reserve or separation of existing dwellings) (for clarity, other subdivisions are not exempt even if creating less than 100 m^2 new impervious area at the time of subdivision); and

(c) development that discharges stormwater to the downstream parts of the public stormwater system, with sufficient capacity to cater for the fully developed catchment (including the development).

22. Any increase in stormwater runoff must be accommodated within one of the following, to the satisfaction of the Manager Waterways:

(a) an existing public stormwater system;

(b) public infrastructure upgraded by the developer as part of the development construction; or

(c) on-site detention designed to offset the increase in stormwater runoff caused by the development.

23. For developments requiring on-site stormwater detention where the additional impervious surface proposed is less than 300m^2, the following standard detention arrangements can be used:

Additional Impervious Area Proposed	**On-Site Detention Required**	**Orifice Size**
Less than 200m^2	2000L min tank size with 500L reserved for detention	20-25mm
200m^2 to 300m^2	4000L min tank size with 1000L reserved for detention	20-25mm

24. For developments requiring on-site stormwater detention where the additional impervious surface proposed is more than 300m^2 or if an applicant would prefer to provide less than the detention specified in paragraph 23, a development specific detention design by a Suitably Qualified Person must be provided, to the satisfaction of Council's Manager Waterways.

25. For a new or altered single dwelling, a pervious area runoff coefficient C_p of 0.3 will be accepted for use in eqn 5.4.8 of the Australian Standards AS/NZS 3500.3:2021 Plumbing and Drainage. Other development should be designed in accordance with either the Australian or the New Zealand runoff coefficient requirements in section 5.4.6.

26. The maintenance of all on-site detention systems is the sole responsibility of the property owner or body corporate.

27. The on-site detention required above may be offset via a cost contribution, at the discretion of the Council's Manager Waterways. Cost contributions are to be assessed on a case-by-case basis depending on the amount of detention required for the development, and the location.

Protection of Council assets

28. Consent by the CEO (who is the Council's General Manager) is required pursuant to section 13 of the *Urban Drainage Act 2013* and section 73 and 74 of the *Building Act 2016*, where work is intended to be carried out within one metre of the public stormwater system or any other distance as determined under section 13 of the *Urban Drainage Act 2013*.

29. The following matters will be considered prior to providing consent in those circumstances:

    (a) The risk of damage to Council stormwater infrastructure during both the construction phase of adjacent works, and the long-term use of the development.

    (b) Any potential long-term of the impacts of the PSS on the development, and associated Council liability.

    (c) The ability to access the asset in both planned and emergency situations, to safely operate, maintain, renew, replace or upgrade Council stormwater infrastructure, including the consideration of safety, condition of asset, risks to surrounding property, and the undue financial burden on rate payers from non-standard construction practices.

    (d) Public safety and the risk to property and infrastructure in the event of an extreme rain event exceeding the hydraulic capacity of the stormwater infrastructure.

    (e) Ecological value, bank stability, and natural meandering of open waterways.

30. Any consent granted may include ongoing conditions and indemnities, such as removal and reinstatement of the works by the current or future owner if required.

31. The General Manager may set out additional requirements to assess the request seeking consent under this legislation.

4. Legislation, Terminology and References

The following definitions apply to this policy:

Annual Exceedance Probability (AEP)	The probability of an event occurring in any given year, usually expressed as a percentage. For example, a 1%AEP flood indicates that there is a 1% chance in any one year of a flooding event of that magnitude occurring.
Council	Hobart City Council.
Major Stormwater System	The combination of overland flow paths (including roads and watercourses) and the underground reticulation system designed to provide safe conveyance of stormwater runoff and a specific level of flood mitigation.
Minor Stormwater System	The stormwater reticulation infrastructure designed to accommodate more frequent rainfall events (in comparison to major stormwater drainage systems) having regard to convenience, safety, and cost.
Public Stormwater System	Has the same meaning as a public stormwater system under the *Urban Drainage Act 2013.*
On-Site Detention	Storage with controlled discharge of stormwater runoff, designed to reduce the peak flow from a site resulting from a storm event.
Runoff	The portion of rainfall that does not infiltrate into the soil, resulting in the presence of surface water.
Stormwater	Has the same meaning as stormwater under the *Urban Drainage Act 2013.*

Suitably Qualified Person	A professional engineer currently practising with relevant CPEng, RPEng, NER or RPEQ accreditation, or a person who in respect to the type of work to be undertaken can adequately demonstrate relevant academic qualification, suitable professional competency, and an appropriate level of professional indemnity and public liability insurance.
Waterway	Has the same meaning as waterway under the *Urban Drainage Act 2013.*

The legislation and documents listed below form the framework to give effect to this policy:

- *Australian Rainfall and Runoff* (www.arr.org.au)
- *Australian Runoff Quality*
- *Australian Standard AS/NZS3500.3:2021 Plumbing and Drainage*
- *Building Act 2016*
- *Land Use Planning and Approvals Act 1993*
- *Local Government (Building and Miscellaneous Provisions) Act 1993*
- *Local Government (Highways) Act 1982*
- Hobart City Council *Infrastructure By-Law No. 1 of 2018*
- *Plumbing Regulations 2016*
- Regional Land Use Strategies
- *Roads and Jetties Act 1935*
- *State Policy on Water Quality Management 1997*
- *Tasmanian Planning Scheme*
- *Tasmanian State Stormwater Strategy 2010*
- Tasmanian Stormwater Policy Guidance and Standards for Development (Derwent Estuary Program 2021)
- *Urban Drainage Act 2013*

This policy is not intended to replace the requirements of this legislation to obtain consent in certain circumstances.

5. Risk

Alignment with this policy is seen to ensure the Council is complying with its statutory and other obligations to manage stormwater in the municipality.

Responsible Officer:	Chief Executive Officer or their delegate
Policy first adopted by the Council:	27 May 2024
History	Not applicable
Next Review Date:	27 May 2026
File Reference:	F24/52550