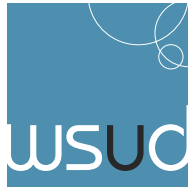


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Water Sensitive Urban Design Site Development Guidelines and Practice Notes



Prepared by the Hobart City Council

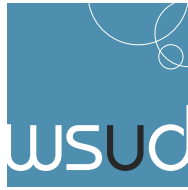


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Acknowledgment

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Input from the Tasmanian Department of Tourism, Arts and the Environment and the use of the Melbourne Water's 'WSUD Engineering Procedures: Stormwater' as a key research document is also acknowledged."

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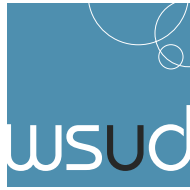
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The Council as the planning authority is required to assess each application for a planning permit in accordance with the provisions of the Land Use Planning and Approvals Act 1993 and the relevant planning scheme. The proposed incorporation of the techniques or approaches proposed in these Guidelines is not to be taken by an applicant as grounds for approving an application for a planning permit or any other statutory approvals. The Council will assess each application on merit based on compliance with the law

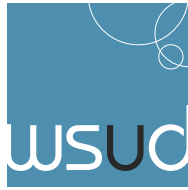




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Water Sensitive Urban Design Site Development Guidelines and Practice Notes **Introduction**





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Introduction – What is WSUD?

Water sensitive design seeks to ensure that development is carefully designed, constructed and maintained so as to minimise impacts on the natural water cycle. It is part of the contemporary trend towards more 'sustainable' solutions that protect the environment.

Water sensitive design can help counteract many of the negative impacts of urban development on the natural water cycle. By utilising appropriate measures in the design and operation of development, it is possible to:

- maintain and restore natural water balance
- reduce flood risk in urban areas
- reduce erosion of waterways, slopes and banks
- improve water quality in streams and groundwater
- make more efficient use of water resources
- reduce the cost of providing and maintaining water infrastructure
- protect and restore aquatic and riparian ecosystems and habitats
- protect the scenic, landscape and recreational values of streams.

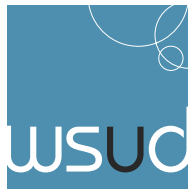
Traditional water supply, stormwater and wastewater practices are largely based on centralised collection, conveyance, treatment and disposal of water flows. By contrast, water sensitive design promotes a more decentralised approach that is more attuned to natural hydrological and ecological processes. It gives greater emphasis to on-site collection, treatment and utilisation of water flows as part of an integrated system that may be applied in addition to or in lieu of conventional stormwater measures. Elements in the system may include:

- use of roof water for toilet flushing, laundry use, hot water systems or irrigation
- reuse of surface runoff and greywater for irrigation purposes
- infiltration of stormwater to underground aquifers
- specially designed landscaping for cleansing runoff and conserving water
- protection of native vegetation to minimise site disturbance and conserve habitat
- protection of stream corridors for their environmental, recreational and cultural values.

Water sensitive design relies on designers responding to the constraints and opportunities of each individual site. Consequently, careful consideration must be given to site characteristics such as soil type, slope, groundwater conditions, rainfall, and the scale and density of development.

This document can be read in conjunction with the document 'WSUD Engineering Procedures for Stormwater Management in Southern Tasmania 2005', Derwent Estuary Program, Department of Primary Industries Water and Environment, which provides more technical detail on the common techniques presented in this document.





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How to use this document

1. Identify type of development you are proposing from the list and refer to the relevant Development Type Guideline.
2. Analyse the site (refer to Appendix A (Site Planning)).
3. Develop a Site Plan (utilising one or more of the common techniques from the list in the relevant Development Type Guideline).
4. Refer to the relevant Practice Note(s) on the Common Techniques to determine design parameters.

