

Water sensitive urban design

Stormwater design considerations

Introduction

This brochure provides an overview of the factors that need to be taken into account when designing stormwater management systems for new urban developments, or when modifying existing systems.

This brochure is part of a series that explain various aspects of water sensitive urban design. Please see

for background information on water sensitive urban design.

Design considerations

flow rates and total volume

ARI peak flow rate and

they flow into 5-year sized

before they flow into 100-

Up to 1-year ARI event

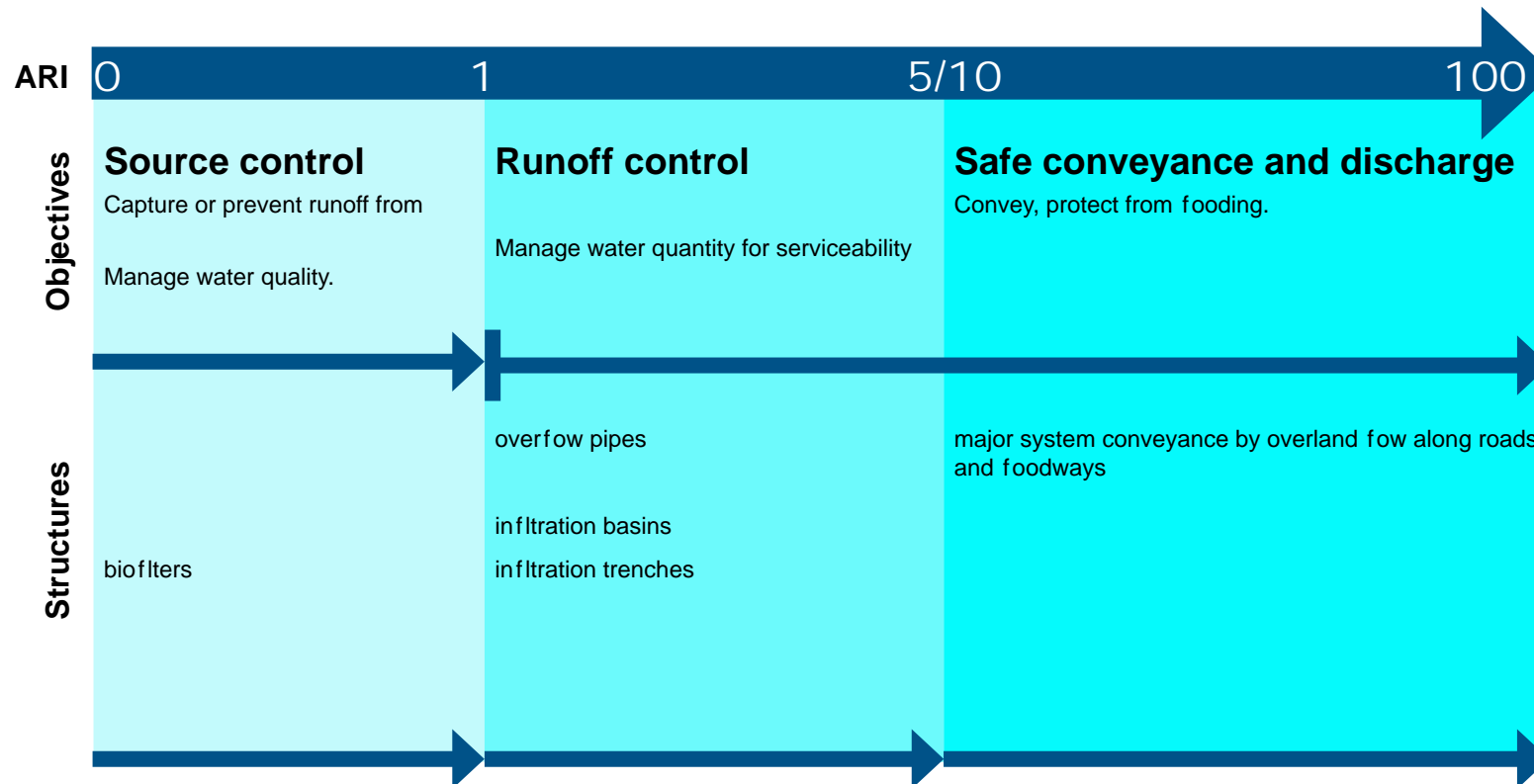
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- Reduce the area and
- Maintain pre-development peak flow rates and total
- Control pollutants at their
- Improve water quality, via filtration.
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Up to the 100-year ARI event

- Flow paths need to be identified during urban
- Contain flows within 'major system conveyance'

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Required reading

Australian rainfall and runoff – a guide to flood estimation, 2001, Engineers Australia.

Australian runoff quality: a guide to water sensitive urban design, 2006, Engineers

Better urban water management, 2008, Western Australian Planning Commission.

Interim guidelines for the preparation of local water management strategies, 2008, Department of Water, available at <www.water>

State planning policy 2.9: Water resources, 2006, Western Australian Planning Commission.

State water plan, 2007, Department of the Premier and Cabinet.

Stormwater management manual for Western Australia, 2004–07, Department of Water,

Urban water management plans: guidelines for preparing plans and for complying with subdivision conditions, 2008, Department of Water, available at <www.water.wa.gov.au>.

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