



Influence of Statutory Land Use Planning on WSUD Practices

The Link Between Land Use Planning and WSUD

Land use planning laws (statutory land use planning) influence the implementation of water sensitive urban design (WSUD). The delivery of WSUD depends on both sound technology and a supportive legal framework.

However, knowledge about the connection between land use planning and the implementation of WSUD has previously been lacking.

This research provides new insights into how statutory planning can be optimised, to support the adoption of WSUD practices.

The Research Program

A framework with four distinct four components of WSUD practice was identified:

- Urban stormwater management
- Management of the urban water cycle as a whole
- The use of centralised and decentralised urban water infrastructure
- Urban design outcomes

This framework was used in a survey and four case studies, to assess how statutory planning influences WSUD practices. Key findings include:

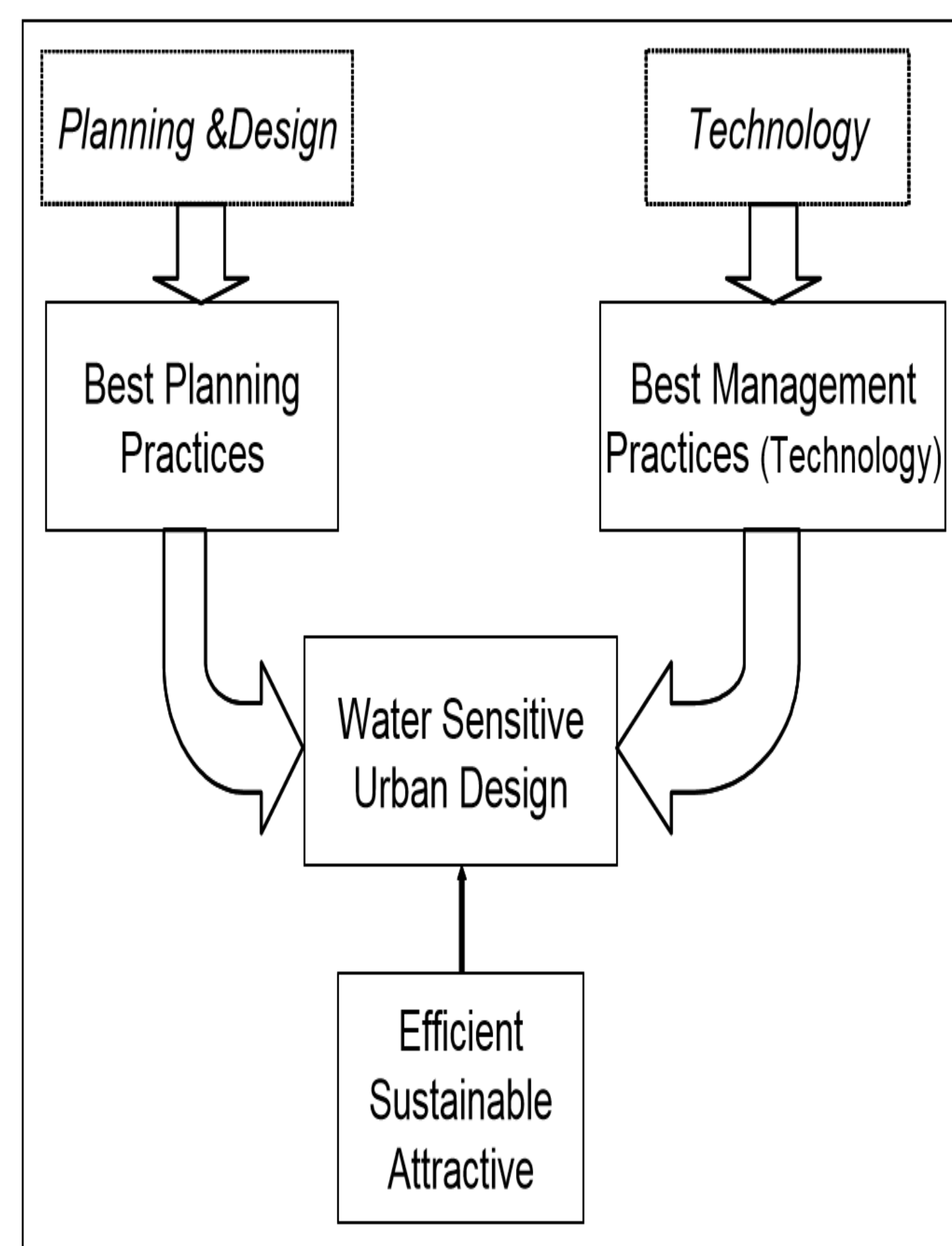
- Statutory planning is a very important determinant of the WSUD practices that are adopted
- Current statutory planning systems focus on urban stormwater management and do not adequately recognise the urban water cycle as a whole, and links between this cycle and urban design
- The statutory land use systems in Australian states interpret WSUD differently. These interpretations reflect the varying physical, historical, cultural and other conditions that apply in different jurisdictions.

The Transition from Research to Implementation

The research will allow statutory planning systems to be refined, so they better support the adoption of WSUD practices. The design of these systems should be informed by the following principles:

- Consider the entire urban water cycle and its link with urban design
- Scale is important: statutory planning should explicitly encourage the adoption of urban water infrastructure at a range of physical scales
- Consider, and respond to, the conditions that apply in each jurisdiction
- Statutory planning has the capacity to include targets and objectives that relate to urban heat island mitigation and urban greening

Land Use Planning Combines with Technology to Produce WSUD Outcomes



Suggested process to identify targets to include in statutory planning controls for a new development

