Framing risk perceptions in transitions to drought and flood resilient cities

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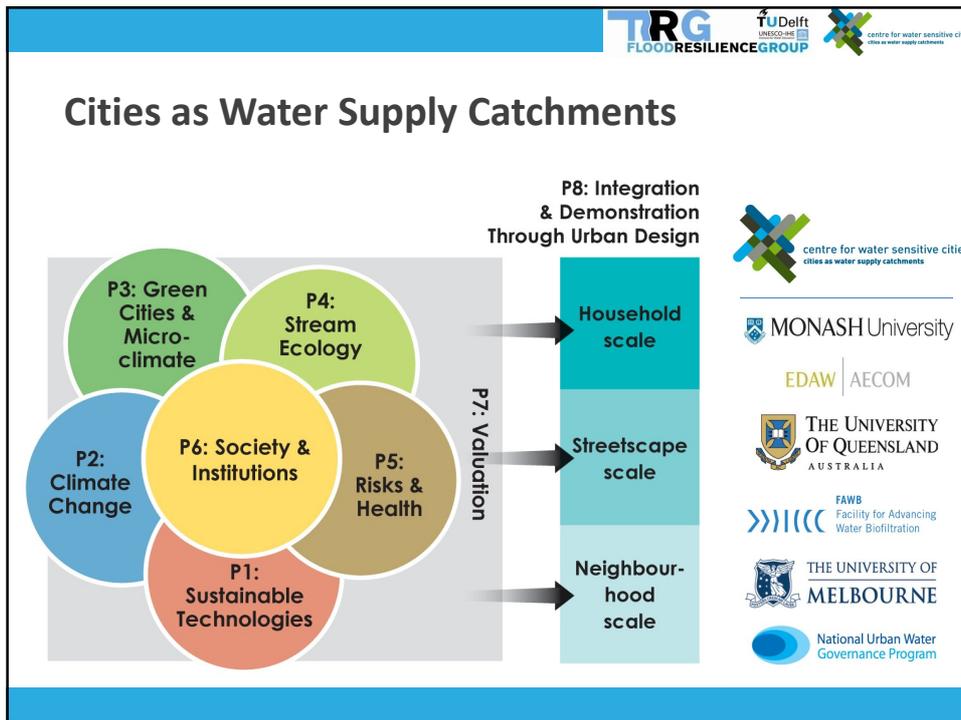
Deltas in Times of Climate Change International Conference

Rotterdam, 30 September, 2010

Understanding urban water networks in Australia

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Cities as Water Supply Catchments

Aim

To understand enabling and constraining factors
in the socio-political context
for widespread implementation
of innovative stormwater harvesting systems
in urban areas.

Objectives

1. To identify <u>social networks</u> and their characteristics pertaining to the urban water sector.
2. To identify <u>key players</u> in the networks, their roles, capabilities and competences.
3. To identify <u>critical factors</u> for decision makers in order to apply innovative urban water systems.
4. To identify <u>strategies</u> of key players to advocate for their pursued urban water futures.

Methodology
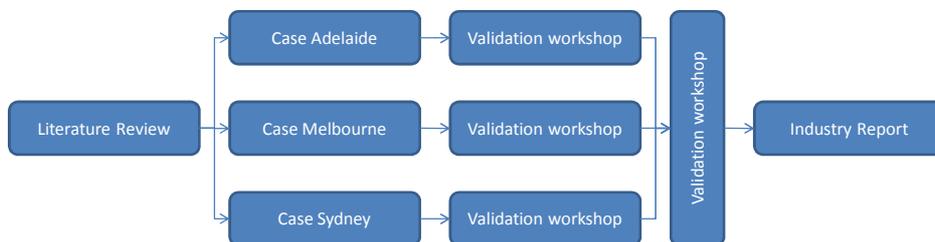
## Governance and networks

Governance

The structures and processes by which social, political and administrative actors purposefully guide, steer, control or manage (sectors or facets of) societies. (adapted from Maynz, 1993).

Networks:

Are the basis for governance through connecting agents (individuals, organizations, agencies, and institutions) at multiple organizational levels (Folke et al, 2005).

Observation from literature (1)
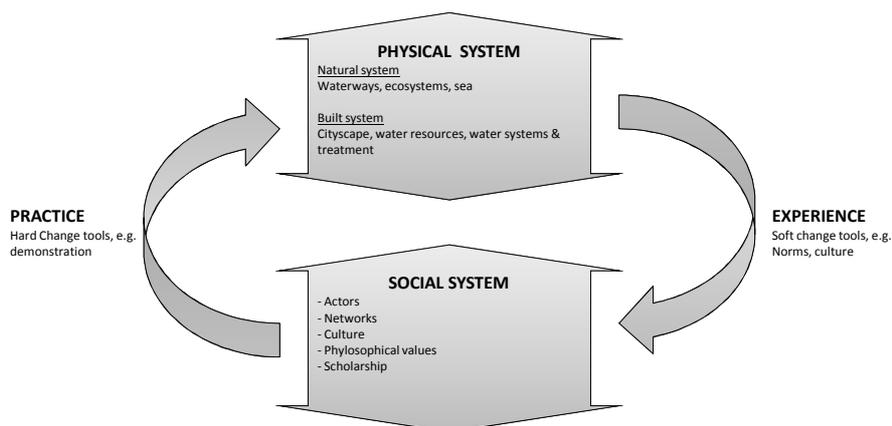
Most research is focused at establishing policy change rather than change in practice

Observations from literature (2)

Two ways of improving outcomes in practice can be considered:

1. Strengthening the ties between social networks and physical world
2. Increasing the effectiveness of social networks to establish change in practice

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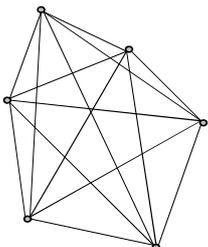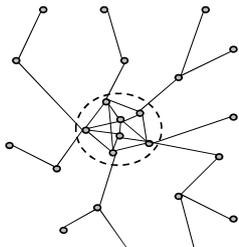## Strengthening the ties between social networks and physical world
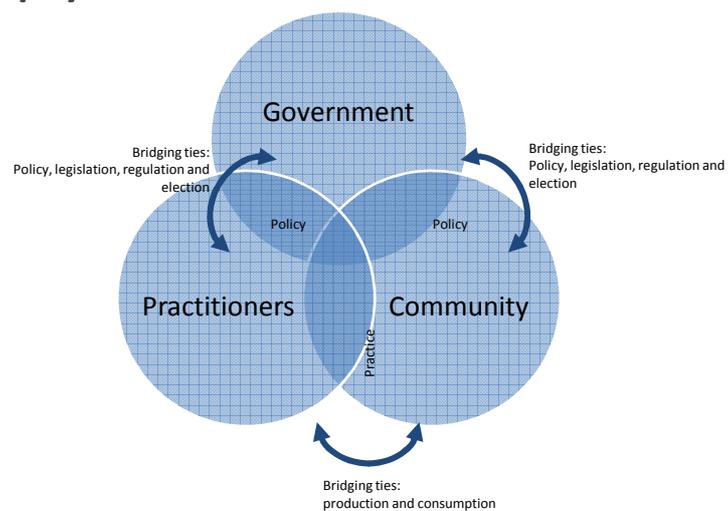
Increasing the effectiveness of social networks to establish change in practice (1)
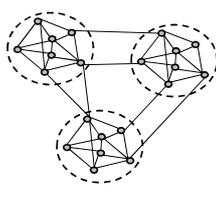
1. Fit-for-purpose network structures

Decentralized | Centralized (adapted from Bodin and Crona, 2009) | Multiple communities (Newman and Girvan, 2004)

Increasing the effectiveness of social networks to establish change in practice (2)

2. Fit-for-purpose network processes

- Social learning
  - \+ Building of shared vision and trust, knowledge
  - \- Requires time and effort

- Leadership
  - \+ Coordination of learning and action
  - \- Legitimacy and equity

Fit-for-purpose network processes

Table 6.1:   Potential purposes of social learning and leadership in different network structures

	Decentralized	Centralized	Multiple communities
Social learning	• Expanding network to new disciplines • Creating cohesion • Creating vision • Increasing understanding of problems and solutions • Increasing trust through collaboration	• Expanding network to new disciplines • Developing and demonstrating alternative vision and solutions • Connecting actors	• Expanding network to new disciplines • Increasing interconnectedness within and between communities • Creating cohesion • Creating vision • Increasing understanding of problems and solutions • Increasing trust through collaboration
Leadership	• Recognising opportunities • Developing new knowledge	• Coordinating and regulating action • Engaging actors • Recognising opportunities	• Engaging actors • Building trust through status • Recognising opportunities

## Adaptive and fit-for-purpose governance

Adaptive governance:

The structures and processes by which social, political and administrative actors purposefully guide, steer, control or manage (sectors or facets of) societies in the face of change (adapted from Mayntz, 1993).

Fit-for-purpose governance:

The measure of adequacy of the functional purposes in the physical world that the governance structure and processes have to fulfil at a certain point of time.

Methodology – Extreme case comparison
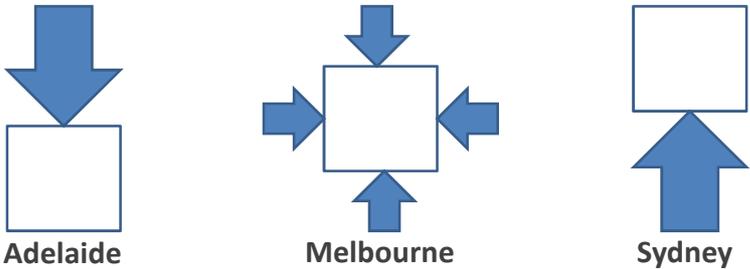
Adelaide   **Melbourne**   **Sydney**

Semi-structured qualitative interviews (3x30):

- Decision makers and decision architects
- Policy makers, planners, regulators, project managers, lobbyists, scientists, consultants, business development, politicians
- State & local government, water authorities, utilities, environmental sector, development sector, water industry

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Some preliminary results

Network structures

- Disconnect between state and local governments
- Moving towards water markets (decentralized)

Network processes

- Different people/cities have different meanings for WSUD and stormwater

Thank you

www.floodresiliencegroup.org

www.watersensitivecities.org.au

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