

CRC for Water Sensitive Cities

Outcomes of Needs & Opportunities Workshop and Project Development Workshop

John Savell & Greg Ryan
Western Regional Advisory Panel
9 December 2015

Outcomes of Perth Needs & Opportunities Workshop: **Strengths and challenges**

Good foundations

- * Networks
- * Science & research

Long way to go

- * Engaged community
- * Vision & narrative
- * Funding & cost benefit analysis
- * Ops & maintenance
- * Monitoring & evaluation

Making progress

- * Leadership
- * Policies & strategies
- * Learning culture & capacity
- * Integrated land & water planning
- * Urban & landscape design

Outcomes of Perth Needs & Opportunities Workshop: **Enabling structures**

- * Coordinated and aligned legislation, regulation and policy for driving water sensitive outcomes (38)
- * Integration and improved collaboration across organisations and sectors (31)
- * Effective and sustainable funding mechanisms for water sensitive practices (drainage and whole of water cycle) (28)

Outcomes of Perth Needs & Opportunities Workshop: On ground practices

- * Integrated planning across sectors, agencies & water systems (24)
- * Framework & evidence to support full life-cycle cost-benefit analysis that also consider non-monetary values (22)
- * Coherent understanding of groundwater systems & interactions with surface waters (20)

Outcomes of Perth Needs & Opportunities Workshop: **Social capital**

- * Better translation of scientific knowledge into practice and policy outcomes (31)
- * Improve water literacy beyond water savings to help drive change (21)
- * Build practitioner capacity through knowledge sharing, demonstration and networks (18)

**Any questions or feedback on
prioritised WA needs?**

Outcomes of Perth Needs & Opportunities Workshop: **Opportunities**

Partnerships to build capacity and community engagement and water literacy

- * Capacity building & national network
- * Community behaviour change for water sensitive communities - build on existing “Switch your thinking” Program

Outcomes of Perth Needs & Opportunities Workshop: Opportunities

Partnerships with proactive & willing developers

- * White Gum Valley – demonstration of water sensitive infill housing
- * Pinjar proposed urban and industrial development
- * Swan Valley Development Area
- * Wanju District Structure Plan – 1,400 ha greenfield development, Shire of Dardanup
- * Hester Park Revitalisation Project, City of Gosnells
- * East Perth Development (Powerhouse), Swan River
- * Muchea Employment Node
- * City of Canning Town Centre Redesign
- * Batavia Coast Marina Stage 2, Geraldton
- * Wungong Living Stream project
- * Nambeelup Industrial Area

Outcomes of Perth Needs & Opportunities Workshop: **Opportunities**

Creating the enabling environment: Embedding water sensitive cities principles into policy, planning, governance and funding

- * Input to design policy reviews (R codes , & Urban Design State Planning Policy)
- * Strategic Assessment Perth Peel Region at 3.5 million – Structure Planning Stage
- * River Protection Strategy – Drainage governance
- * Busselton Drainage Reform
- * Kwinana rural drain upgrade – Vesting change from Water Corporation to Town of Kwinana
- * Traditional drainage design vs Living streams – Cost benefit analysis

Outcomes of Perth Needs & Opportunities Workshop: Opportunities

Partnerships to trial innovative technologies and approaches

- * Western Suburbs Aquifer Recharge Project
- * Broome non-potable water supply for public open space
- * Water efficiency improvement on the Gnangara Mound – alternative water management approaches for peri-urban horticulture
- * Monitor and evaluate Urban Waterways Renewal Program – WSUD project sites
- * Stormwater harvesting and salinity management, Merredin

Outcomes of Perth Needs & Opportunities Workshop: Opportunities

Continue and build on Tranche 1 projects:

- * Implement A4.2 Plan to Transition Greater Perth to a Water Sensitive City by 2065
- * Extend project to better understand interactions between surface water and groundwater; how water moves in the urban landscape, risks to the aquifer and approaches to manage contamination and use water
- * Build on current monitoring and evaluation projects (e.g. North Forrestdale greenfield development)

**Any questions or feedback on
WA opportunities?**

Outcomes of Project Development Workshop, 2 & 3 Dec, Melbourne

Tranche 2 - Combined Needs: Enabling structures

1. Strengthening and aligning policy, legislation and regulation in support of water sensitive cities
2. Creation of a shared vision and narrative for water sensitive cities that connects with community values , which can then drive decision making
3. New financial model and incentives that recognise the values and benefits of water sensitive cities
4. Robust and inclusive decision making frameworks
5. Governance frameworks that enable coordination and collaboration across agencies and sectors
6. Holistic evaluation frameworks to support water sensitive city investments

Outcomes of Project Development Workshop, 2 & 3 Dec, Melbourne

Tranche 2 - Combined Needs: On-ground practices

7. Guidance on how to develop context-specific solutions and asset management regimes
8. Achieving multiple benefits through integrated planning, and design of water systems and the urban form
9. Next generation of flood risk assessment frameworks and tools for a water sensitive cities approach
10. Monitoring and evaluation for improved system design and performance
11. Efficient and effective operations and maintenance systems to achieve water sensitive city outcomes
12. Coherent understanding of groundwater systems and interactions with surface waters

Outcomes of Project Development Workshop, 2 & 3 Dec, Melbourne

Tranche 2 - Combined Needs: Social capital

13. Influencing water sensitive city outcomes through leadership, collaboration and networks
14. A culture of learning and innovation
15. Translation and sharing of water sensitive cities knowledge
16. Building community and industry connection and engagement
17. Building capacity to deliver a water sensitive cities

Preliminary Research Clusters

- **Steering Transitions**
 - Guiding and influencing
- **Integrated Planning and Implementation**
 - Coordinated and aligned decision making
- **Context Specific Solutions**
 - Green / grey / brownfield (infill)
 - Flood / heat / groundwater / climate change ...
 - Social and cultural context
- **Monitoring and Performance Optimisation**
 - Performance of technical, natural and management systems
 - Optimisation and design
- **Socio-economic evaluation frameworks**
 - Believable narrative for macro and micro-level audiences

**Any questions or feedback on
preliminary Tranche 2 research
clusters?**

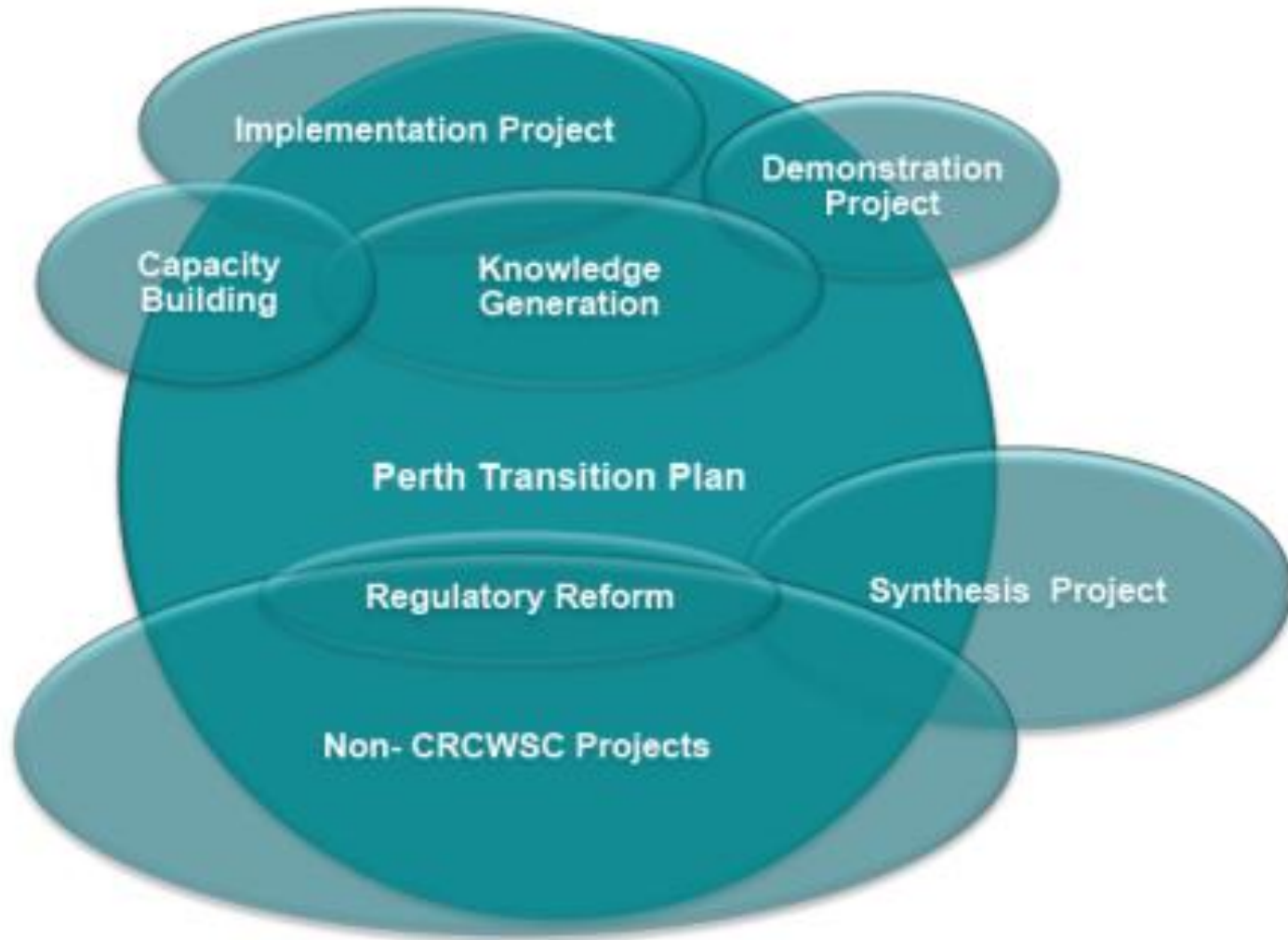
Research Synthesis

Case studies that are well suited to Research Synthesis have:

- * the potential for innovation at the precinct scale, and may be greenfield or infill/redevelopment contexts,
- * industry partners that are committed to delivering the project, are open to collaboration and welcoming of new ideas,
- * sufficient scope to incorporate new ideas into options analysis and concept planning,
- * specific constraints or opportunities for improved urban water cycle management.

Additionally, projects may present an opportunity to address 1 or more of the 5 research clusters.

What is a tranche 2 project?



Next steps

Selection of WA research synthesis case studies:

- * Capture any additional WA research synthesis opportunities
- * Western RAP to help prioritise potential projects – feedback needed soon
- * Jamie Ewert will work with project proponents to scope project in more detail (process already underway in Qld, Vic & NSW)

Next steps

Development of Tranche 2 projects - Iterative process between now and March 2016

- * CRC Executive to review all Tranche 2 programme scope based on workshop outcomes
- * Identify and engage research clusters caretakers and RAP project Champions (mid Dec)
- * RAPs to provide comments on developing project portfolios
- * Input from other groups, sectors or stakeholders
- * Peer review of emerging research clusters/projects by RAC
- * Second Project Development Workshop 15 February 2016
- * Presented to Board for noting and Comment (end Feb 2016)
- * Develop Specific T2 projects March 2016
- * Joint researcher industry project teams to further develop refine project details
- * Priorities action of T2 projects in each city/ region April/May 2016
- * RAPS and Advisory Committees fully established by April/May 2016
- * Board Review of proposed project portfolios April/May 2016
- * Board Approval June 2016.

Questions and discussion