CRC for Water Sensitive Cities

Project Proposal

1. **Project title:** IRP1 Water Sensitive City Transition Strategies and Implementation Plans

Summary: IRP1 aims to deliver a suite of participatory methods and associated tools for developing strategic guidance to cities and towns wanting to accelerate and build momentum for the transition towards their envisioned water sensitive future. The project focuses on developing and testing processes across multiple case study regions at different scales – from neighbourhood to metropolitan to regional. A comprehensive and scientifically-informed transition strategy will articulate targeted guidance to local stakeholders, building on the foundations of a shared vision, informed by a thorough analysis of the current regional context and future drivers, and supported by a feasible implementation plan. Innovative participatory processes will be facilitated to develop a strong narrative, clear water policy direction and a delivery framework to create alignment and drive coordinated action amongst government, industry and community stakeholders. The project builds on and utilises previous CRCWSC research that developed envisioning processes, community engagement strategies and the WSC Index tool. It will involve close collaboration between research and industry partners to ensure the project outcomes directly influence the policies and activities of local stakeholder organisations to catalyse and accelerate their city's transition to its desired water sensitive future. The project outcomes (including tools and reports) will also help other water sector participants to develop their own visions and transition strategies.

This proposal presents the overall framework for the project and how it will be applied in multiple case study locations across Australia. Specific details on the activities in each selected case study will be further developed in close collaboration with industry partners during the first phase of the project.

2. **Project leader & deputy:** Briony Rogers (Monash University) and Kelly Fielding (University of Queensland)

3. **Project type and activity:** Integrated Research Project and co-developed case studies

4. **Participating organisations & team structure:**

Name	Title	Affiliation	Contribution/role
Briony Rogers	Dr	CRCWSC/Monash University	Project leader
Kelly Fielding	A/Prof	CRCWSC/University of QLD	Deputy project leader
Katie Hammer	Ms	CRCWSC/Monash University	Research assistant
TBA	Dr	CRCWSC/Monash University	Post-doctoral research fellow (transitions)
Angela Dean	Dr	CRCWSC/University of QLD	Post-doctoral research fellow (community)
Chris Chesterfield	Mr	CRCWSC	Project team member
Barry Ball	Mr	CRCWSC	Project team member

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Warren Traves	Mr	GHD Consulting and QLD RAP	Queensland regional representative
Don Crawford	Mr	WA Dept. of Water	WA regional representative (shared role)
Cara Bourne	Ms	WA Dept. of Water	WA regional representative (shared role)
Benjamin White	Mr	VIC Dept of Environment, Land, Water and Planning	Victoria regional representative
Phillip Birtles	Mr	Sydney Water	New South Wales regional representative

5. **Project aim(s) and objectives:** The project aims to deliver a suite of participatory methods and associated tools for developing strategic guidance to cities and towns wanting to accelerate and build momentum for the transition towards their envisioned water sensitive future. These methods and tools will be applicable across neighbourhood, metropolitan and regional scales and have the flexibility to be tailored to local contexts in terms of resource availability, timing and stakeholder interest. The project will build on Tranche 1 CRCWSC projects focused on envisioning, benchmarking and community support to achieve this aim, addressing the following objectives:

   1) Enhance, refine, implement and evaluate the developed benchmarking, envisioning and backcasting process methodologies across different spatial scales.
   2) Integrate, test and refine developed CRCWSC knowledge and tools into the participatory methods to support communication and understanding about WSC concepts and transition dynamics. (Specific knowledge and tools to be integrated are likely to vary from case to case but may include the WSC Index, scenario approaches, collaborative maps, computer models, visual representations, terminology and engagement strategies.)
   3) Develop transition strategies and implementation plans for selected regions to advance their WSC vision, incorporating tools to redress transition barriers, existing regional initiatives, local stakeholder knowledge and research findings from across the CRCWSC Tranche 1 program.
   4) Analyse the processes and patterns of change across the selected case studies to evaluate the effectiveness of the participatory methods, transition strategies and implementation plans in steering policy and practice towards the WSC vision.

6. **Identified transition needs:** Each of the four Needs and Opportunities workshops (QLD, VIC, NSW, QLD) identified that having a shared vision and narrative for water sensitive cities that connects with community values and drives decision-making is critical. The need for alignment amongst government, industry, and community members to enable coordination and collaboration across agencies and sectors was also identified as critical in each of the regions. Both of these needs were observed at multiple scales, including metropolitan, regional cities and towns, and precinct/community scales.

7. **Knowledge base and research gaps:** The water sensitive city concept (Wong and Brown, 2009) is being increasingly promoted as a future approach to water management as stakeholders consider how to deal with the uncertainty and complexity associated

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with climate change, population growth and urbanisation pressures. Though cities are beginning to transition to this approach, it is recognised that water sectors globally tend to be locked-in to traditional practices due to path dependencies and other related institutional factors (Brown et al., 2011). Overcoming these barriers requires strategic and operational alignment across the sector to encourage collaboration and innovation but policy-makers and practitioners need guidance on how this alignment can be fostered to steer desired water sensitive city transitions (Ferguson et al., 2013). In current sustainability transitions literature, participatory processes such as visioning have been highlighted as a way to guide collaborative and integrated city-wide transitions within particular infrastructure sectors, although the effectiveness of this approach at different scales has yet to be tested.

This integrated research project aims to address this gap by using participatory processes to develop transition strategies and implementation plans for case study locations across multiple scales (i.e., city, regional, etc). The project builds on the visioning process developed by Tranche 1 Project *A4.2 Mapping Water Sensitive City Scenarios* in which WSC visions and transition strategies were developed at a metropolitan scale for Greater Perth, and at a community scale for Elwood, Victoria. IRP1 will also incorporate the WSC Index, which was developed in Tranche 1 as part of project D6.2, along with lessons from the A2 citizen engagement projects. Other developed knowledge and tools from CRCWSC Tranche 1 may also be integrated as appropriate. The knowledge base of both the workshop participants and the Regional Advisory Panels will be critical for informing the project outputs in order to ensure the strategies are relevant and specific to the local context.

8. **Research questions and approach:** The overarching scholarly questions are:
   1. How can community, government and industry stakeholders at different spatial and engagement scales be brought together in participatory forums to develop a shared understanding of the challenges, aspirations and opportunities for advancing water sensitive cities?
   2. How can local and city-scale water sensitive transitions be deliberately steered and coordinated through strategic intervention?
   3. What strategies, processes and representations can be used to increase support and a shared commitment for the water sensitive transition amongst different stakeholders (e.g., community, institutional and political leaders)?
   4. What are the key drivers of successful implementation of WSC transition strategies and plans?

   These questions will be addressed through a series of case studies that design, implement and evaluate envisioning and transition strategy development processes. The figure below summarises the sequencing of these five phases of activity, with further detail provided in the following table. Ongoing evaluation of the case study activities will provide opportunity to develop insight into the effectiveness of the participatory processes, communication tools and transition strategies developed. For phases 1-3, there are ‘light’ and ‘full’ versions that could be facilitated, depending on stakeholder interest and resources available.

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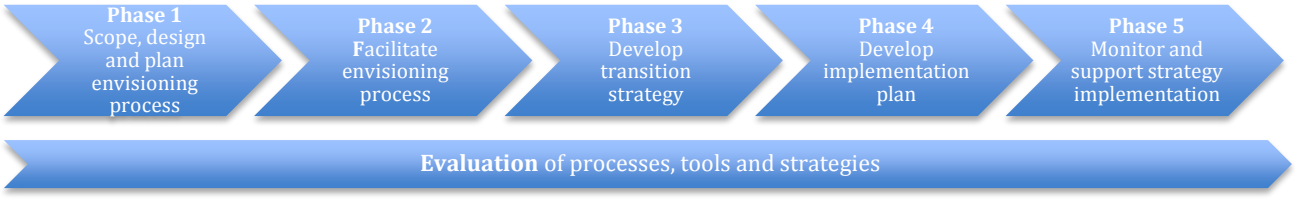

Phase	Goal	Full version		Light version	
		Key activities	Approx. duration	Key activities	Approx. duration
1	Scope, design and plan envisioning process	Targeted recruitment and interviewing of participants, detailed case context analysis	6 months	Targeted recruitment of participants, brief case context analysis	3 months
2	Facilitate envisioning process	6 workshops involving a full visioning and backcasting process and application of the WSC Index	6 months	2 workshops involving an abridged visioning process and application of the WSC Index	2 months
3	Develop transition strategy	Develop comprehensive transition strategy based on Phase 2 outputs	3 months	Develop an outline transition strategy based on Phase 2 outputs	1.5 months
4	Develop implementation plan	3 workshops to support development of strategies and actions for implementation	6 months	–	–
5	Monitor and support strategy implementation	Ongoing communication and workshops with project participants	18+ months	–	–

Case Study Selection and Definition

The following table summarises the potential case studies identified in collaboration with industry partners with a broad understanding of the transition needs of their region; background information on each is provided in Appendix A. Case studies tentatively selected for funding by the core IRP1 budget are indicated; these are selected to cover multiple scales (regional, metropolitan and town/catchment), to ensure each CRCWSC region has some activity and to deliver an impactful project within the available budget. Additional industry funding may be sought to support the implementation of processes in the remaining case study locations. Final confirmation of selected case studies will be made by the end of September 2016 through further engagement with the project team, regional RAPs and local stakeholders.

Region	Case study	Spatial scale	Tentatively selected for IRP1 funding
WA	Perth	Metropolitan	Full process, phases 3-5
VIC	Bendigo	Town / Catchment	Full process, phases 1-4
	Melbourne	Metropolitan	
SA	Adelaide	Metropolitan	
QLD	South East Queensland	Regional	Light process, phases 1-3
	Townsville	Town / Catchment	
NSW	Sydney	Metropolitan	Light process, phases 1-3
	Orange	Town / Catchment	
	Newcastle	Town / Catchment	
SA	Adelaide	Metropolitan	Light process, phases 1-3

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This proposal provides a framework for IRP1 but the scope and focus of activities for each selected case study location will need to be tailored in close collaboration with industry partners during Phase 1. The following questions will be resolved for each case study to ensure the process design and use of associated tools are suitable and that relevant local knowledge and contextual opportunities are well-integrated:

- What are the spatial boundaries?
- What type outcomes would be most relevant and impactful?
- Which CRCWSC knowledge and tools would add value to the process?
- What type of stakeholders should be involved in the process?
- What level of stakeholder engagement and commitment already exists?
- Are there previous or current activities that can be leveraged?
- What specific risks need to be managed?

9. **Intended project outcomes and expected project impact:** The project will deliver:

- Safe forums in each case study location for diverse stakeholders to develop a deep and shared understanding of aspirations, issues and opportunities for accelerating their water sensitive city transition
- Shared learnings of the direct application of tranche 1 projects as they apply to this project to all stakeholders
- For each 'full' process case study: A transition strategy and implementation plan, comprising a thorough analysis of the local context and drivers, WSC benchmark of the current system, contextualised water sensitive city vision, suite of strategies for overcoming key challenges and achieving the vision, and an actionable plan for implementing the identified strategies.
- For each 'light' process case study: An outline transition strategy, comprising a WSC benchmark of the current system, high level water sensitive city vision and priority strategies for overcoming key challenges and achieving the vision.
- Technical report providing a comparative analysis of the contexts, WSC visions, transition strategies, and patterns and drivers of change across the case studies.
- Technical report on strategies for engaging with communities to build their support for water sensitive city transitions.
- Process guidelines for participatory envisioning, backcasting and scenario methods, and the use of associated tools, for developing strategic guidance to accelerate water sensitive city transitions.

These outcomes are expected to lead to a motivated group of stakeholders who are working towards a common vision in each case study location, which in turn, will enable better coordination, alignment and collaboration in future activities to catalyse and accelerate their transition to water sensitivity. In addition, the CRCWSC will develop capacities, in the form of new knowledge, refined participatory methods and associated tools, to provide strategic guidance to cities and towns in support of their water sensitive city transition goals.

10. **Targeted end-user group(s):** Stakeholders across a city or region's urban water management and planning sectors, along with community members of the city or region, will benefit from the project outcomes, by either direct participation in the project or by broader advancement of the region's water sensitive city agenda. It is anticipated that the network of industry stakeholders who participate in the project workshops will continue to drive their region's water sensitive transition and influence other stakeholders and industry organisations to also be an important part of the transition. This type of network, which can be either formal or informal, will assist in the dissemination and adoption of water sensitive policy and practice.

11. **Commercialisation and Intellectual Property (IP):** Outputs from this project could form the basis for guidance manuals, training modules and consulting services run by the CRCWSC in the future. The project will also provide the context for testing and refining CRCWSC tools and products (e.g. WSC Index, computer models) across the different case studies.

12. **Industry/end-user participation:** Industry participants form part of the project team that will work together to develop the specific activities of each case study. A representative from each region is on the project team that will meet regularly throughout the project to ensure the process is tailored to suit the specific needs of each region. Industry participants have a comprehensive understanding of the unique water issues that each region faces, the physical, social, and political contexts of each region, the stakeholder interest and the resources that may be available to implement this process. Industry participants will be actively involved throughout all phases of this project, having already been involved in this proposal development, through to carrying out the project activities on the ground, and finally to implementing the project outcomes to ensure they are adopted in the future. The regional representatives on the project team will also be responsible for communicating about the project with the Regional Advisory Panel and other appropriate industry members. The project team will communicate regularly through emails, teleconferences, workshops in each region, and a biannual face-to-face meeting. In light of the pivotal role that senior executive and political support plays in steering transitions, the project will aim to engage these stakeholders in the processes as well. Input from the Tranche 1 A3 policy influence researchers will be sought in this regard.

13. **Translation/adoption pathways:** The processes in this project are designed to develop the most effective strategies for influencing policy and practice at multiple scales. At the city scale, outcomes will be translated into policy and practice through the participants' actions and subsequent roles and responsibilities of their organisations. Project outcomes will also play a role in developing and improving capacity building programs in order to spread knowledge and generate broad commitment to the water sensitive agenda. The implementation phase of case studies in this project is important for the adoption of project outcomes. The CRCWSC will help guide adoption through insights from previous research outputs (e.g. community engagement and policy influence strategies), along with contextual knowledge to develop strategies to most effectively maximise adoption.

    Execution of phases 1 and 2 in Perth in A4.2 has successfully generated ongoing commitment of senior stakeholders through the establishment of the Water Sensitive

Transition Network. This network of professionals is comprised of a self-selected group of project participants who want to continue meeting in order to ensure the identified actions are implemented and transition progress is monitored.

At the local scale, citizens draw on their local knowledge and experiences to develop specific solutions to local water management issues. These design ideas can be used to directly inform infrastructure planning and capital expenditure of local councils and water utilities. In addition, the local scale processes provide a forum for developing and trialling strategies to engage community members with the water sensitive city vision.

14. Work plan, project timelines and milestones:

14.1 Work plan

The work plan consists of general activities for the project overall, as well specific activities for each case study, which will need to be determined during Phase 1 in discussion with the local RAP once final budget allocations are confirmed.

A. DESIGN AND DEVELOPMENT ACTIVITIES

A.1 Process design enhancements
The generic process design will be enhanced, building on insights from the A4.2 processes implemented in Perth and Elwood. Key innovations will include strengthening the community engagement activities and integrating application of the WSC Index and other CRCWSC knowledge and tools as appropriate. The process design will then need to be tailored to suit the specific needs of each region, so each case study application will be designed in collaboration with regional representatives.

A.2 Transition strategy and implementation plan concept development
This will involve conceptually developing the templates for WSC Transition Strategies and Implementation Plans, including the structure, content and methodological options underpinning the deliverables for both 'full' and 'light' versions. Input and endorsement will be sought from RAPs, EPRG, Advisory Committees and if appropriate, the Board.

A.3 Development of frameworks for evaluation
A suite of frameworks and indicators will be developed to evaluate the effectiveness of the: (1) implemented participatory processes in creating shared understanding and commitment for the transition to a WSC amongst diverse stakeholders; (2) tools for supporting communication about, and building support for, WSC concepts; and (3) developed transition strategies in pursuing the WSC transition agenda for the case study cities.

B. CASE STUDY ACTIVITIES

The case studies in white are proposed within the IRP1 budget (July 2016 – June 2018). Additional options in grey form are beyond the current IRP1 scope and would require additional industry funding to be delivered. The case studies selected are tentative and will be confirmed by the end of September 2016 through further discussion with the RAPs, EPRG and Advisory Committees.

Case Study		Phases	Full	Light	Resourcing
WA	Perth	3: Transition strategy 4: Implementation plan 5: Monitoring & support	X		Current IRP1 budget Jul 16 – Jun 18
		5: Monitoring & support	X		Additional industry funding required for monitoring and support beyond Jun 18.
VIC	Bendigo	1: Scoping & planning 2: Envisioning process 3: Transition strategy 4: Implementation plan	X		Current IRP1 budget Jul 16 – Jun 18
		5: Monitoring & support	X		Additional industry funding required for monitoring and support beyond Jun 18.
QLD	SEQ	1: Scoping & planning 2: Envisioning process 3: Transition strategy		X	Current IRP1 budget Jul 16 – Jun 18
		1: Scoping & planning 2: Envisioning process 3: Transition strategy 4: Implementation plan 5: Monitoring & support	X		Additional industry funding required. Key stakeholders: Brisbane City Council, SEQ Water
	Townsville	1: Scoping & planning 2: Envisioning process 3: Transition strategy 4: Implementation plan 5: Monitoring & support	X	X	Additional industry funding required. Key stakeholder: Townsville City Council
NSW	Sydney	1: Scoping & planning 2: Envisioning process 3: Transition strategy		X	Current IRP1 budget Jul 16 – Jun 18
		1: Scoping & planning 2: Envisioning process 3: Transition strategy 4: Implementation plan 5: Monitoring & support	X		Additional industry funding required. Key stakeholder: Sydney Water
	Orange	1: Scoping & planning 2: Envisioning process 3: Transition strategy 4: Implementation plan 5: Monitoring & support	X	X	Additional industry funding required. Key stakeholders: Central Tablelands LLS, Orange City Council
	Newcastle	1: Scoping & planning 2: Envisioning process 3: Transition strategy 4: Implementation plan 5: Monitoring & support	X	X	Additional industry funding required. Key stakeholders: Newcastle City Council
SA	Adelaide	1. Scoping & planning 2. Envisioning process 3. Transition strategy		X	Current IRP1 budget Jul 16 – Jun 18 plus additional industry funding

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C. EVALUATION ACTIVITIES

C.1 Evaluate processes, tools and strategies

A range of evaluation methods will be employed, including surveys, interviews and focus groups. Data for the process evaluations will be collected pre- and post-process to gain insight into how and why it was (or was not) effective, to identify opportunities for process improvements, and to assess the (potential) impact of the process over the longer term. Communication tools, such as the WSC Index, collaborative maps, visual representations, terminology and engagement strategies, will be evaluated to assess how well they improved participants' understanding and commitment to the WSC transition agenda. Transition strategies developed through the IRP1 process will be evaluated over the life of the project to assess the impact they have in accelerating the WSC transition for each case study city. Examination of factors that facilitate or inhibit implementation of the strategies will be a focus of the evaluation.

C.2 Develop generalised insights on city transition dynamics

The water narratives, policies and practices in each city will be monitored over the life of the project to examine the patterns and processes of change that occur for different contexts in response to major drivers and windows of opportunities. Cross-case comparison will provide generalised insights on the dynamics of water sensitive city transitions.

D. COMMUNICATION AND DISSEMINATION ACTIVITIES

D.1 Project team communications

The project team, consisting of CRCWSC researchers, CRCWSC executive committee members and RAP representatives for each case study region, will communicate through regular teleconferences and two in-person meetings per year. The purpose of these communications will be to keep all stakeholders informed about the overall project progress and to ensure lessons from across regional case studies are widely shared.

The project team will also liaise with other researchers in the CRCWSC to ensure that insights emerging from the broader research program are fed into the project. A communication plan will be developed for each case study to effectively communicate project outputs with broader CRCWSC participants and other potential end users.

D.2 Stakeholder communications

While the delivery of IRP1 has direct benefits to the targeted regions, the outcomes, new research and the direct application of tranche 1 research benefit the broader CRC stakeholder cohort. Cities like Melbourne can benefit from understanding the findings for the work in Perth and Sydney proposed under this project. A communication plan will be developed to ensure informing the broader stakeholders is achieved.

D.3 Research dissemination

Industry reports and journal articles will be prepared throughout the project, starting with the development of preliminary process guidelines documenting the envisioning methodology developed in Tranche 1 A4.2 and results from the Perth and Elwood case studies to date. As further case study results are obtained, technical reports on a

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comparative analysis and building community support will be written, as will the final guidance manual for the process methodologies developed in the project.

15.2 Timeline of tasks/activities

Activities in grey form and year 3 activities will be scoped subject to additional co-investment from industry partners. Regional RAPs need to confirm which case study location will be resourced by the approved IRP1 budget and which will be pursued through additional industry funding.

Description of task	Year 1	Year 2	Year 3
	2016/17	2017/18	2018/2019
A. Design and development activities			
Design process methodology enhancements			
Develop transition strategy and implementation plan concepts			
Design frameworks for evaluating processes, tools and strategies			
B. Case study activities			
WA (Perth) Phase 3 full – Develop transition strategy			
WA (Perth) Phase 4 full – Develop implementation plan			
WA (Perth) Phase 5 full – Monitor & support implementation			
VIC (Bendigo) Phase 1 full – Scope, design and plan process			
VIC (Bendigo) Phase 2 full – Facilitate envisioning process			
VIC (Bendigo) Phase 3 full – Develop transition strategy			
VIC (Bendigo) Phase 4 full – Develop implementation plan			
QLD (SEQ) Phase 1 light – Scope, design and plan process			
QLD (SEQ) Phase 2 light – Facilitate envisioning process			
QLD (SEQ) Phase 3 light – Develop transition strategy			
NSW (Sydney) Phase 1 light – Scope, design and plan process			
NSW (Sydney) Phase 2 light – Facilitate envisioning process			
NSW (Sydney) Phase 3 light – Develop transition strategy			
SA (Adelaide) Phase 1 light – Scope, design and plan process			
SA (Adelaide) Phase 2 light – Facilitate envisioning process			
SA (Adelaide) Phase 3 light – Develop transition strategy			
Alternative or additional regional activities (depending on funding)			
VIC – Melbourne (supporting DEWLP stakeholder forums)			
QLD – SEQ (full version)			
QLD – Townsville (light or full version)			
NSW – Sydney (full version)			
NSW – Orange (light or full version)			
NSW – Newcastle (light or full version)			
C. Evaluation activities			
Evaluate processes, tools and strategies			
Develop generalised insights on city transition dynamics			
D. Communication and dissemination activities			
Regular project team teleconferences			
Project team workshops			
Prepare industry reports and journal articles for publication			

Activities to be scoped subject to additional industry co-investment

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14.3 Project milestone & deliverables

No.	Milestone/deliverable description*	Accountable team members	Due date+
1	Detailed transition strategy for Perth (WA)	Briony Rogers	30 Sep 2016
2	Implementation plan for Perth (WA)	WA RAP/Regional Manager	30 Jun 2017
3	Outline transition strategy for Sydney (NSW)	Briony Rogers & Kelly Fielding	31 Dec 2017
4	Outline transition strategy for Adelaide (SA)	Briony Rogers & Kelly Fielding	31 Dec 2017
5	Outline transition strategy for SEQ (QLD)	Briony Rogers & Kelly Fielding	30 Jun 2018
6	Detailed transition strategy for Bendigo (VIC)	Briony Rogers & Kelly Fielding	31 Dec 2017
7	Implementation plan for Bendigo (VIC)	VIC RAP/Regional Manager	31 Jun 2018
8	Guidance manual for enhanced envisioning process methodology (A4.2 deliverable)	Briony Rogers & Kelly Fielding	31 Jun 2018
9	Technical report on comparative analysis of case study results	Briony Rogers	30 Jun 2018
10	Technical report on building community support	Kelly Fielding	30 Jun 2018

* Listed items are for activities proposed within the IRP1 Jul 2016 – Jun 2018 budget. Additional milestones and deliverables would be established upon expansion of the project scope to other case studies if further industry funding is secured.
+ Milestone dates assume Year 1 begins July 2016 and that there is active participation and leadership from regional stakeholders to ensure timely implementation of processes.

1. Resources:

The budget estimate is for the selected case studies. If alternative locations are substituted or added to the project scope the budget would need to be reassessed. The budget for Year 3 will be developed subject to additional co-investment from industry in each of the regions. The project leader and deputy leader will be supported by an experienced research team and significant input of CRCWSC leadership; their in-kind contribution reflects this.

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IN-KIND		Year 1	Year 2	Year 3
Salaries	**Role (Organisation)**	**Jul 16 – Jun 17**	**Jul 17 – Jun 18**	**Jul 18 – Jun 19**
Briony Rogers	Project Leader (Monash)	0.20 FTE	0.20 FTE	
Kelly Fielding	Deputy Project Leader (UQ)	0.20 FTE	0.20 FTE	
Chris Chesterfield	Strategic Input (CRCWSC)	0.20 FTE	0.20 FTE	
Barry Ball	Strategic Input (CRCWSC)	0.10 FTE	0.10 FTE	
Don Crawford / Cara Bourne	WA regional representative (DoW)			
Ben White	VIC regional representative (DEWLP)			
Warren Traves	QLD regional representative (GHD)			
Phillip Birtles	NSW regional representative (Sydney Water)			
Operations				
Region	**Activities and outcomes**			
WA (Perth)	Workshops (venue, catering, materials)	$8,000	$3,000	
VIC (Bendigo)	Workshops (venue, catering, materials)	$8,000	$10,000	
QLD (SEQ)	Workshops (venue, catering, materials)		$3,000	
NSW (Sydney)	Workshops (venue, catering, materials)	$3,000		
SA (Adelaide)	Workshops (venue, catering, materials)	$10,000	$20,000	
	Sub-total	**$29,000**	**$36,000**	
CASH				
Salaries	**Role (FTE, Organisation)**	**Jul 16 – Jun 17**	**Jul 17 – Jun 18**	
Katie Hammer	Research Assistant (1.0, Monash)	$110,000	$120,000	
Angela Dean	Research Fellow – Community (0.6, UQ)	$100,000	$110,000	
TBA	Research Fellow – Transitions (0.6, Monash)	$100,000	$110,000	
	Sub-total	**$310,000**	**$340,000**	
Operations				
Region	**Activities and outcomes**			
WA (Perth)	Phase 3 full: Develop detailed transition strategy	$3,000		
	Phase 4 full: Facilitate 4 workshops, develop implementation plan	$18,000		
	Phase 5 full: Facilitate 2 workshops, monitor and support implementation		$7,000	
VIC (Bendigo)	Phase 1 full: Engage stakeholders, design process, recruit people	$8,000		
	Phase 2 full: Facilitate 6 workshops	$16,000	$8,000	
	Phase 3 full: Develop detailed transition strategy		$12,000	
	Phase 4 full: Facilitate 4 workshops, develop implementation plan		$12,000	
QLD (SEQ)	Phase 1 light: Engage stakeholders	$3,000		
	Phase 2 light: Facilitate 2 workshops		$12,000	
	Phase 3 light: Develop outline transition strategy		$6,000	
NSW (Sydney)	Phase 1 light: Engage stakeholders	$3,000		
	Phase 2 light: Facilitate 2 workshops		$12,000	
	Phase 3 light: Develop outline transition strategy		$6,000	
SA (Adelaide)	Phase 1 light: Engage stakeholders	$3,000		
	Phase 2 light: Facilitate 2 workshops		$12,000	
	Phase 3 light: Develop outline transition strategy		$6,000	
	Interview transcriptions	$5,000	$5,000	

Activities to be scoped subject to additional industry co-investment

General	CRC travel and research dissemination Project team biannual meeting	$15,000 $8,000	$20,000 $8,000	
	Sub-total	**$94,000**	**$114,000**	
	TOTAL CASH BUDGET	**$404,000**	**$454,000**	

2. Risk assessment and management:

Risk	Impact	Management action
Lack of support from local stakeholders	Will not have the resources or participant commitment to run a fully effective process	Get broad buy-in from stakeholders in initial communication and recruitment phase through strong messaging, evidence, and high-level support
Participants may not be comfortable stepping outside their standard mode of engagement	Will not be able to fully explore different perspectives in order to get the most depth and diversity in content	Provide a safe environment within workshops so participants feel free to speak
Community expectations of industry partners may be raised in relation to a radical long-term vision	Community members are dissatisfied with the rate of progress or the outcomes that are implemented	Clearly communicate from the beginning that radical ideas are encouraged to push boundaries but smaller outcomes need to be implemented over time to reach that vision. Strategic advice and endorsement from industry partners will be regularly sought to ensure community engagement protocols are established to manage partner sensitivities.
Strong interest and expectations from both industry and other CRCWSC projects	The project may become stretched beyond its scope	The project scope and outcomes need to be clearly defined while accommodating the potential synergies of the other CRCWSC projects. Project budget will also need to be clearly defined with opportunities for industry to contribute if further interest is identified.
Regulatory and institutional barriers to implementing the developed transition strategies	The impact of the project may be limited	Ensure the processes provide opportunity to focus on potential implementation barriers and identify strategies and actions that can be pursued to overcome these barriers.

3. References:

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APPENDIX A – DETAILS OF POTENTIAL CASE STUDIES

Western Australia

Perth: Significant commitment and momentum exists in Perth among a stakeholder group of local champions (the Water Sensitive Transition Network), which evolved out of *Project A4.2 Mapping Water Sensitive City Scenarios*. A vision and transition framework was developed in this project. The Perth case study will begin with Phase 3, involving a consolidation of other CRCWSC research outputs in Perth and existing regional initiatives. This phase will integrate these outputs into a transition strategy with prioritised actions, clear accountabilities and mechanisms for implementing the strategy. The implementation plan (Phase 4) will build on the strategies and actions identified in the A4.2 process and utilise CRCWSC research findings in policy influence and community engagement to facilitate adoption.

Victoria

Bendigo: There has been strong interest from Bendigo, a regional city in Victoria, to develop a WSC vision, transition strategy and implementation plan. Its main driver is population growth, which is projected to almost double to 200,000 people by 2051. It is a water-stressed city but has a robust, collaborative and innovative leadership group that wants to bring the whole community on the journey toward a smart, resilient and water sensitive city.

Melbourne: As part of DEWLP's State Water Plan activities, a series of stakeholder forums are planned to inform the development of regional water strategies. The IRP1 project team could support these forums in a range of ways.

South Australia

Adelaide: From an infrastructure perspective Adelaide has made significant advances on the WSC pathway but there is a need for to align the culture and institutions through developing a water sensitive vision. There is an active group in Adelaide that could form the backbone of future activities and there is a keen interest in making use of WSC tools such as the WSC Index and in trying to engage other important regional stakeholders through these activities.

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Queensland

South East Queensland: There is a strong desire in SEQ to create more liveable cities and towns within a unique tropical and subtropical environment. The need for change is driven by scarcity of water sources, catchment and waterway health, and economic implications for new water sources such as desalination, along with major water transportation infrastructure. A shared vision and transition strategy is seen by local stakeholders as critical for aligning stakeholders towards the common goal of a water sensitive transition

Townsville: The City of Townsville has a strong desire for driving the transition towards water sensitivity in order to maintain water supply in tropical wet and dry seasons in the face of a population expecting to double in the next 35 years.

New South Wales

Sydney: Despite significant good will across New South Wales and especially Greater Sydney, there is currently a lack of consistent agreed vision for the role of water to provide the sustainable, resilient, and productive city outcomes desired by government policy makers. Currently, the Greater Sydney Commission is focused on recasting the land use planning and general direction of the city over the 2016-2017 period which provides an opportunity for water related agencies and organisations to coalesce around a transition plan.

Orange: There is a significant opportunity for regional towns to embed water sensitive city outcomes as they experience consolidation and growth. Currently Orange, Cabonne, and Blayney are proposed for amalgamation and are located at the top of a major catchment (the Macquarie catchment), which poses significant opportunity for mobilising stakeholders towards a water sensitive city transition. This will be aided by the fact that Orange City Council was the first Council in Australia to collect and re-use stormwater for (indirect) potable use, to augment town water supply.

Newcastle: The central business district of Newcastle is undergoing revitalisation with a number of landmark development projects in progress. Residents have become increasingly more involved in the planning processes and have valuable knowledge and clear objectives for the locality. While there is adequate engagement of industry stakeholders, there remains a gap in the area of total catchment management for Cottage Creek; as a result, planning is going ahead without regard to water sensitive outcomes. The need to reduce flood risk and implement water sensitive solutions is necessary however difficult in the current planning process. A shared water sensitive vision and transition strategy could build on the platform of stakeholder representation for the revitalisation and address the poor coordination to ensure water sensitive outcomes are implemented.

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