

## Regional Advisory Panel

<b>Meeting No. 3</b>	<h1>Meeting Minutes</h1>	<b>UWA CBD Office, WA Trustee Building, Level 2, 133 St Georges Tce, Perth @ 8am</b>
<b>18/05/2016</b>		

### Attendees

<b>Greg Claydon</b> (Inaugural Chair) CRC for Water Sensitive Cities	<b>Anas Ghadouani</b> CRC for Water Sensitive Cities	<b>Antonietta Torre</b> Department of Water	<b>Max Hipkins</b> City of Nedlands
<b>Jennifer Stritzke</b> Department of Parks and Wildlife	<b>Giles Pickard</b> City of Subiaco	<b>Ben Harvey</b> Department of Planning	<b>Greg Ryan</b> LandCorp
<b>Sergey Volotovskiy</b> Water Corporation	<b>Naomi Rakela</b> EMRC	<b>John Savell</b> Department of Housing	<b>Shelley Shepherd</b> New Water Ways
<b>Jurg Keller</b> CRC for Water Sensitive Cities	<b>Adri Dharma</b> CRC for Water Sensitive Cities		

### Apologies

<b>Bruce Young</b> UDIA	<b>David Horn</b> GHD		
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Item No.	Agenda Topic
1.	<p><b>Welcome and Apologies</b></p> <p>The Chair opened the meeting at 8:07am and welcomed everyone in attendance.</p> <p>The Chair acknowledged that Bruce Young and David Horn are apologies.</p>
2.	<p><b>Record of Discussion</b></p> <p>The Record of Discussion from the last Regional Advisory Panel meeting was endorsed, noting that, in future less commentary can be included.</p>
3.	<p><b>Matters Arising From Previous Minutes</b></p> <p>Actions from the previous meeting have been completed. Matters Arising from previous minutes were not discussed beyond what was discussed at this meeting.</p>

Item No.	Agenda Topic
4.	<p><b>Tranche 2 Update</b></p> <p>Jurg Keller joined the meeting to give a presentation on the update on Tranche 2 Activities. A detailed document of the presentation is attached. (<i>Attachment 4.1</i>)</p> <p><b>Key Activities 2016/17</b></p> <p><b>Finalising Tranche 1 Projects</b></p> <p>One of the key activities for 2016/17 is completing Tranche 1 projects. A number of Program B and C projects are still going on into the FY 2016/17. Programs A and D are mostly finishing at the end of June of FY 2015/16. Some remaining projects will be transferred into the new T2 projects. A lot of T1 outcomes will build the foundations of T2.</p> <p><b>Tranche 2 Overall Framework</b></p> <p>It is proposed that Tranche 2 includes Integrated Research Projects (IRP), WSC Tools &amp; Products (TAP), Regional Projects and WSC Transition Strategies, noting that knowledge transfer and adoption, capacity building and participant engagement are also in T2.</p> <p><b>Proposed Tranche 2 Integrated Research Projects (IRP)</b></p> <p>It is proposed that IRP1 will start early 2016/17 and IRP2 will start in early 2017. The latter will be very much informed by the outcome of the current economic projects which are finishing June this year.</p> <p>It is proposed that IRP5 will build on existing activities. Project B2.23 will be continuing into 2016/17 with the budget of \$340,000. One of the challenges is that one of the key researchers in project B2.4, Carlos Ocampos, could have his contract finished at the end of June 2016 as B2.4 finishes then. However, Jurg Keller is confident that there will be an extension to this contract.</p> <p><b>The Next Steps</b></p> <p>The next step in developing the T2 program is to get this Framework to the Board at the Board Meeting on Thursday, 26<sup>th</sup> May. It will also be the sign off on the budget for the next FY.</p> <p>The CRC Executives have identified that IRP1 is to get started as soon as possible as there is leverage from T1 funding and it will give the blueprint to the follow up activities in all the regions. The outline of IRP1 is being prepared, with opportunity for input from the champions from each region.</p> <p>The next 6 months will be the planning period for IRP2, with the input of the champions from the connected projects from the RAPs.</p> <p><b>WRAP Issues and Discussions</b></p> <p>RAP members expressed concerns that the proposed T2 program did not align with earlier</p>

Item No.	Agenda Topic
	<p>expectations built by the CRC. Jurg clarified that the funding of the ongoing T1 projects is not coming out from T2's funds. The budget of \$9m for T2 activities remains. RAP members commented that T2 now looks like a 2017–2020 program, not 2016–2020.</p> <p>WA RAP's Research and Adoption Plan has a fair bit on the Adoption end. The Research side of things have been discussed at the meeting, but there is no visibility about what's been proposed as the Adoption plan. There is no visibility on the knowledge transfer and capacity building element. Jurg Keller advised that this will be discussed at the Board meeting. The RAP members reiterated that the Regional Manager position is a high priority.</p> <p>Jurg advised that the co-funding for the Regional Manager is staggered across the regions, depending on the co-funding received from the different players or RAPs. The next FY will be a transition year. In the next FY, the Regional Manager will take over the role of the RED. Resource allocation depends on each of the RAPs to define what sort of activities they'd like to see in the individual region. The knowledge translation/broker will be managed by RAP/RED in the transition year.</p> <p>A national research action plan summary of 2016/17 with T1 ongoing and T2 activities would be helpful for the RAP to keep track of what is being proposed and how RAP can be involved.</p> <p>For each of the RAP project ideas that has been proposed, a champion (or a contact person) has been nominated to be involved in the project development.</p> <p>It is of interest to the RAP to find out the kind of budget and resources in the adoption program so the RAP can prioritise to optimise the benefits. The RAP is advised that as soon as the Board has signed off the overall budget framework, they will have the chance to do so. Without this the proposed T2 Framework is an incomplete set of information.</p> <p>The RAP requested that both Jurg Keller and Fiona Chandler attend the next RAP meeting to enable discussion about the total picture. The RAP decided to inform the Board regarding the actions they would like to be carried out as soon as possible so as not to lose momentum. The points that will be brought up by the Chair commenting on the findings of the meeting are as follows:</p> <ol style="list-style-type: none"> <li>1. The WA RAP recognises the overall Framework but the identification of the researchers and corresponding budget of the projects that have been put forward are required.</li> <li>2. IRP5 needs to start as soon as possible so that a key researcher can continue.</li> <li>3. A Regional Manager who is fully funded by the CRC is required to start as soon as possible.</li> <li>4. RAP members and project 'champions' are ready to be actively involved in co-developing the T2 program and projects.</li> </ol>



Item No.	Agenda Topic
	<p>5. Proposals for the adoption projects/budgets need to be communicated as a matter of priority so that the overall proposed research and adoption plan can be reviewed and assessed.</p> <p><b>ACTION:</b> The Chair and Anas Ghadouani to discuss the outcomes of the RAP meeting with the CRC Board and Executive, respectively.</p>
5.	<p><b>Western Region Event Schedule 2016 - 2017</b></p> <p>Western Region Event Schedule 2016 – 2017 was not discussed.</p>
6.	<p><b>CRCWSC Board Update</b></p> <p>CRCWSC Board Update was not discussed.</p>
7.	<p><b>Other Business</b></p> <p>Regarding the Scenario Planning workshop by Darryl Low Choy, it will be favourable to ask Darryl what can be achieved from the workshop so it is clear if it will be beneficial to join the workshop.</p>
8.	<p><b>Meeting Close</b></p> <p>The meeting closed at 9.55am.</p> <p>The Chair thanked the Regional Advisory Panel members for their attendance.</p> <p>The next meeting is set down for Wednesday, 15 June 2016.</p>

Actions	Description
1.	The Chair and Anas Ghadouani to discuss the outcomes of the RAP meeting with the CRC Board and Executive, respectively.



CRC for  
**Water Sensitive Cities**

# **2016-17 Tranche 2 Projects and Activities**

***28 April 2016***



Australian Government  
Department of Industry and Science

**Business**  
Cooperative Research  
Centres Programme

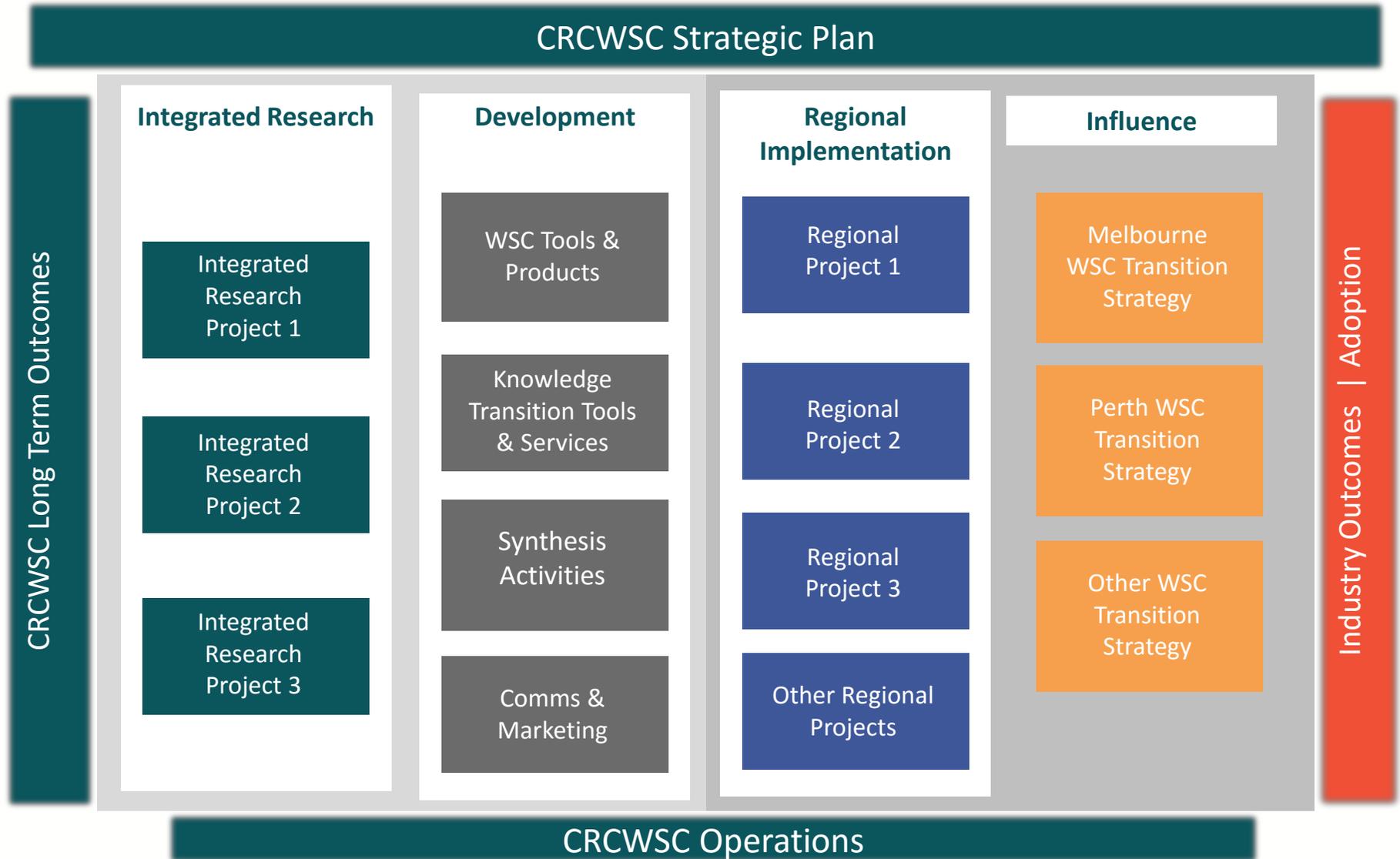
# Key Activities for 2016/17

- Completing Tranche 1 projects
- Translating Tranche 1 research outputs into relevant knowledge tools (e.g. policy notes, case studies etc...)
- Initiating the first Tranche 2 projects and continue development of future projects/activities
- Testing and enhancing WSC Tools and Products (e.g. WSC Toolkit, WSC Index)
- Commence development of regional WSC Transition Strategies
- Evolution of the Regional Advisory Panels
- Continue research synthesis projects that establish the foundation for integrated, regional WSC solutions
- Transition of the CRCWSC's governance to support the transition and implementation of WSC outcomes

# Tranche 2 Overall Framework

- To achieve both the long-term CRCWSC outcomes and the expected industry benefits/adoption, four Activity areas are proposed in the Tranche 2 period:
  - **Integrated Research** – addressing ongoing national research/application needs through key research projects jointly developed and executed between researchers and end-users
  - **Development** – capturing and translating existing knowledge and outputs from Tranche 1 into applicable tools, products and services
  - **Regional Implementation** – engaging with the RAPs/end-users to apply and adapt outcomes and tools/products from the research activities
  - **Influence** – home of the WSC Transition Strategy for each region (or part thereof), which are to be developed jointly with each RAP and should inform future policy and implementation activities.

# Tranche 2 Overall Framework of Projects and Activities



# Tranche 2 Project Types

- Four types of T2 Projects are proposed to be developed based on the RAP project ideas and the prioritised Research Activities.
- Project Teams are expected to comprise both industry and research partners.
  - **Integrated Research Projects (IRP)** – national projects addressing broad research needs; researcher lead with industry co-development
  - **WSC Tools & Products (TAP) Development Projects** – application focused, with potential commercial value, industry or researcher lead; examples include DAnCE4Water, Integrated WSC Toolkit, WSC Index, plus new tools/products
  - **Regional Projects (REG)** – regional focus, industry lead with transferability of outputs to other regions. Potential to have additional investment from local stakeholders
  - **WSC Transition Strategies** – developed through a national WSC Transition Strategy framework (part of IRPs), tailored to the local situation; local WSC Transition Strategies will be RAP led and managed by the Regional Manager

# Priority Research Activities based on RAP feedback

Count	Research Activity (RA)	RA Title	Rank order from RAPs										
			WA1	WA2	WA3	WA4	WA5	WA6	WA7	High VIC1	High VIC2/3	Low VIC4	High VIC5
			Advancing the vision (Transition Strategy)	Knowledge broking and building capacity	Governance regulatory policy and delivery frameworks in WA	Local scale water supply and servicing	WSUD science in WA	Responsible Urban Form	Improved frameworks for evaluation of costs, risks and performance of water sensitive practices	Greening Bendigo (Regional City-based WSC)	Arden-Mcaulay Redevelopment/ Fisherma n's Bend (Urban City-based WSC)	Sunbury Growth Corridor (Emerging City-based WSC)	Dandenong Catchment (Catchment-based WSC)
2	1.1	Enabling the development of water sensitive institutions			H								
1	1.2	Managing the risks of water sensitive innovation through a range of regulatory methods with pa											
9	1.3	Developing community support for water sensitive innovation	H	H									
6	1.4	Strategic policy influence for water sensitive cities	H		H								
3	1.5	Transition laboratories for water sensitive cities	H										
4	2.1	Operationalising Visions & Narrative through "joined up" planning and implementation process									H1		
6	2.2	Integrating WSC values across urban planning, urban design and implementation activities at su									H2		H3
1	2.3	Towards science informed planning and urban design for WSCs											
1	2.4	Integrating WSC principles, theory and lessons into core curriculum of Built Environment tertiary											
7	2.5	Operationalising and modelling urban water mass balance for strategic planning										H4	H4
2	2.6	Co-designing water sensitive catchments and precincts											
4	3.1	In-fill developments									H3	H1	
3	3.2	Urban microclimate											
3	3.3	WSUD Groundwater Science				H	H	H					
3	3.4	Maintenance and sustainability of WSUD systems								H4	H3		
1	4.1	Science of selecting suitable surrogates and indicators for system validation											H3
0	4.2	Utilising cheap, easy-to-use sensors and data analytics for efficient infrastructure monitoring											
1	4.3	Optimising the societal benefits of WSUD through social monitoring											
0	4.4	Monitoring and validation framework for assessing the multiple benefits of water infrastructure											
9	5.1	Economic values, evaluation and incentives	H							H		H2	
4	5.2	Evaluation to inform compelling narratives & decision-making											
2	5.3	Trusted and understandable evaluative criteria											
1	5.4	Envisioning and evaluating the resource performance of Water-Sensitive Cities											
0	6.1	WSC Index (not yet completed)											
0	6.2	WSC Integrated modelling (Toolkit) (not yet completed)											
2	6.3	DAnCE4Water - Modelling tools to support water sensitive planning											

# Priority Research Activities based on RAP feedback

			Rank order from RAPs													Medium-High	Low	High
RAP			1	3	5	2	6	4	3 (32)	4 (27)	2 (35)	5 (25)	1 (38)	SA1	SA2	SA3		
Count	Research Activity (RA)	RA Title	QLD1	QLD2	QLD3	QLD4	QLD5	QLD6	NSW1	NSW2	NSW3	NSW4	NSW5					
			A transition plan for SEQ	Stormwater catchment management authority	UQ living and learning laboratory	Norman Creek catchment	Southbank precinct	Northern Tropics	Developing a common vision and narrative	Capacity building for Water Sensitive NSW	Uniting CRCWSC outputs and stakeholders for water sensitive outcomes	The regional context for the adoption and implementation WS Towns and Cities Principles	Enabling Integrated Water Cycle Management (IWCM) in Urban Infill and Land Release	Adelaide airport recycled water irrigation trial	Integrated water source networks	Greenhill Precinct		
2	1.1	Enabling the development of water sensitive institutions						H4										
1	1.2	Managing the risks of water sensitive innovation through a range of regulatory methods with pa																
9	1.3	Developing community support for water sensitive innovation	H	H	H3			H1		H1								
6	1.4	Strategic policy influence for water sensitive cities		H					H							H1		
3	1.5	Transition laboratories for water sensitive cities	H						H									
4	2.1	Operationalising Visions & Narrative through "joined up" planning and implementation process									H2	H	H4			H2		
6	2.2	Integrating WSC values across urban planning, urban design and implementation activities at su				H1		H3			H3	H						
1	2.3	Towards science informed planning and urban design for WSCs										H						
1	2.4	Integrating WSC principles, theory and lessons into core curriculum of Built Environment tertiary			H1													
7	2.5	Operationalising and modelling urban water mass balance for strategic planning			H3		H1						H3			H4		
2	2.6	Co-designing water sensitive catchments and precincts						H2			H1							
4	3.1	In-fill developments			H2								H2					
3	3.2	Urban microclimate				H2	H4							H1				
3	3.3	WSUD Groundwater Science																
3	3.4	Maintenance and sustainability of WSUD systems		H														
1	4.1	Science of selecting suitable surrogates and indicators for system validation																
0	4.2	Utilising cheap, easy-to-use sensors and data analytics for efficient infrastructure monitoring																
1	4.3	Optimising the societal benefits of WSUD through social monitoring								H4								
0	4.4	Monitoring and validation framework for assessing the multiple benefits of water infrastructure																
9	5.1	Economic values, evaluation and incentives					H3			H2	H4	H	H1	H2	H2	H3		
4	5.2	Evaluation to inform compelling narratives & decision-making		H						H3								
2	5.3	Trusted and understandable evaluative criteria				H3								H3				
1	5.4	Envisioning and evaluating the resource performance of Water-Sensitive Cities					H2											
0	6.1	WSC Index (not yet completed)																
0	6.2	WSC Integrated modelling (Toolkit) (not yet completed)																
2	6.3	DAnCE4Water - Modelling tools to support water sensitive planning				H4									H1			

# Tranche 2 Project Development Priorities

## Priorities of Research Activities based on RAP feedback

– Overall Priorities of Research Activities across most/all RAPs

RAP Ranking* * from Combined RAP Priorities matrix	Research Activity No.	Title
Very high	1.3	Developing community support for water sensitive innovation
Very high	5.1	Economic values, evaluation and incentives
High	1.4	Strategic policy influence for water sensitive cities
High	2.2	Integrating WSC values across urban planning, urban design and implementation activities at sub-city scales
Medium	1.5	Transition laboratories for water sensitive cities
Medium	2.1	Operationalising Visions & Narrative through “joined up” planning and implementation processes
Medium	2.5	Operationalising and modelling urban water mass balance for strategic planning
Medium	3.1	In-fill developments
Medium	3.2	Urban microclimate

# Tranche 2 Project Development Priorities

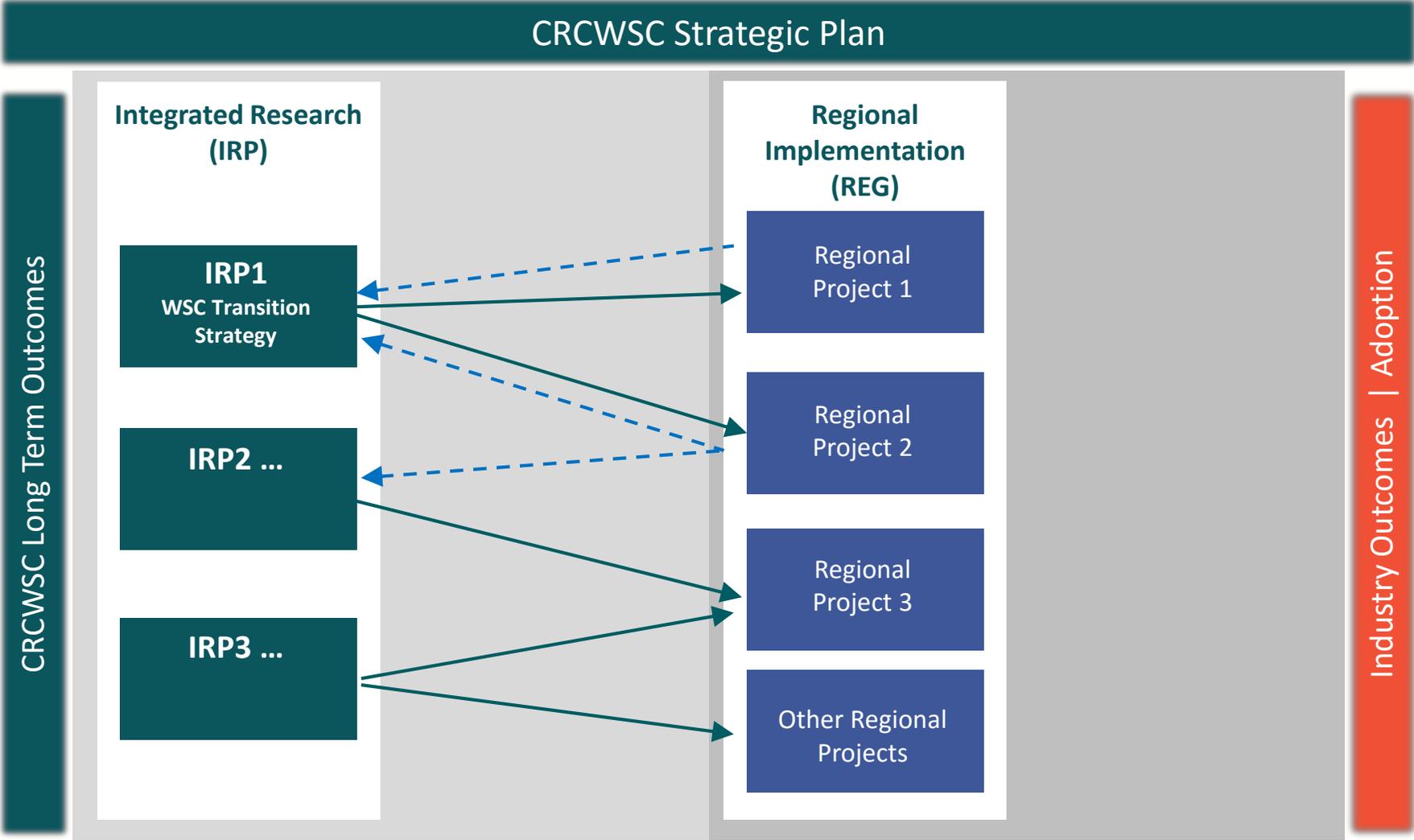
- Other identified Research Activities of importance to particular RAPs

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<b>RAP Ranking*</b> <small>*from-Combined RAP Priorities matrix</small>	<b>Research Activity No.</b>	<b>Title</b>	<b>RAP</b>
<b>High</b>	3.3	WSUD Groundwater Science	WA
<b>Medium/high</b>	5.2	Evaluation to inform compelling narratives & decision-making – WSC Integrated Modelling	QLD & NSW
<b>Medium/high</b>	3.4	Maintenance and sustainability of WSUD systems	VIC & QLD
<b>Medium/high</b>	1.1	Enabling the development of water sensitive institutions	WA

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# Tranche 2 Project Linkages



# Proposed Tranche 2 Integrated Research Projects (IRP)

Projects that will commence in 2016/17:

## **IRP1: WSC Transition Strategy and Implementation Plans**

- **Aim:** Develop WSC Transition Strategies for each RAP region with strong alignment of vision and support across all relevant stakeholders
- **Output:** WSC Transition Strategies and Implementation Plans for each RAP region to outline shared pathway towards overall beneficial outcomes

## **IRP2: Comprehensive Economic Evaluation Framework**

- **Aim:** Create an agreed evaluation framework to identify economic, environmental and community values of water-related investments
- **Output:** Accepted and aligned evaluation framework that is applied to business case development and decision making at multiple levels in public and private sector organisations

# Proposed T2 Integrated Research Projects (IRP)

Project Proposals will be developed for the following projects in 2016/17 with expected start in early 2017/18 as related Tranche 1 activities are completed:

## **IRP3: Evidence-based integrated urban planning across different scales**

- **Aim:** Enable integrated planning processes across different scales and jurisdictions utilising knowledge-based evidence as key input
- **Output:** Policy development and implementation framework that supports and demonstrates the application and value of evidence based integrated planning at different scales

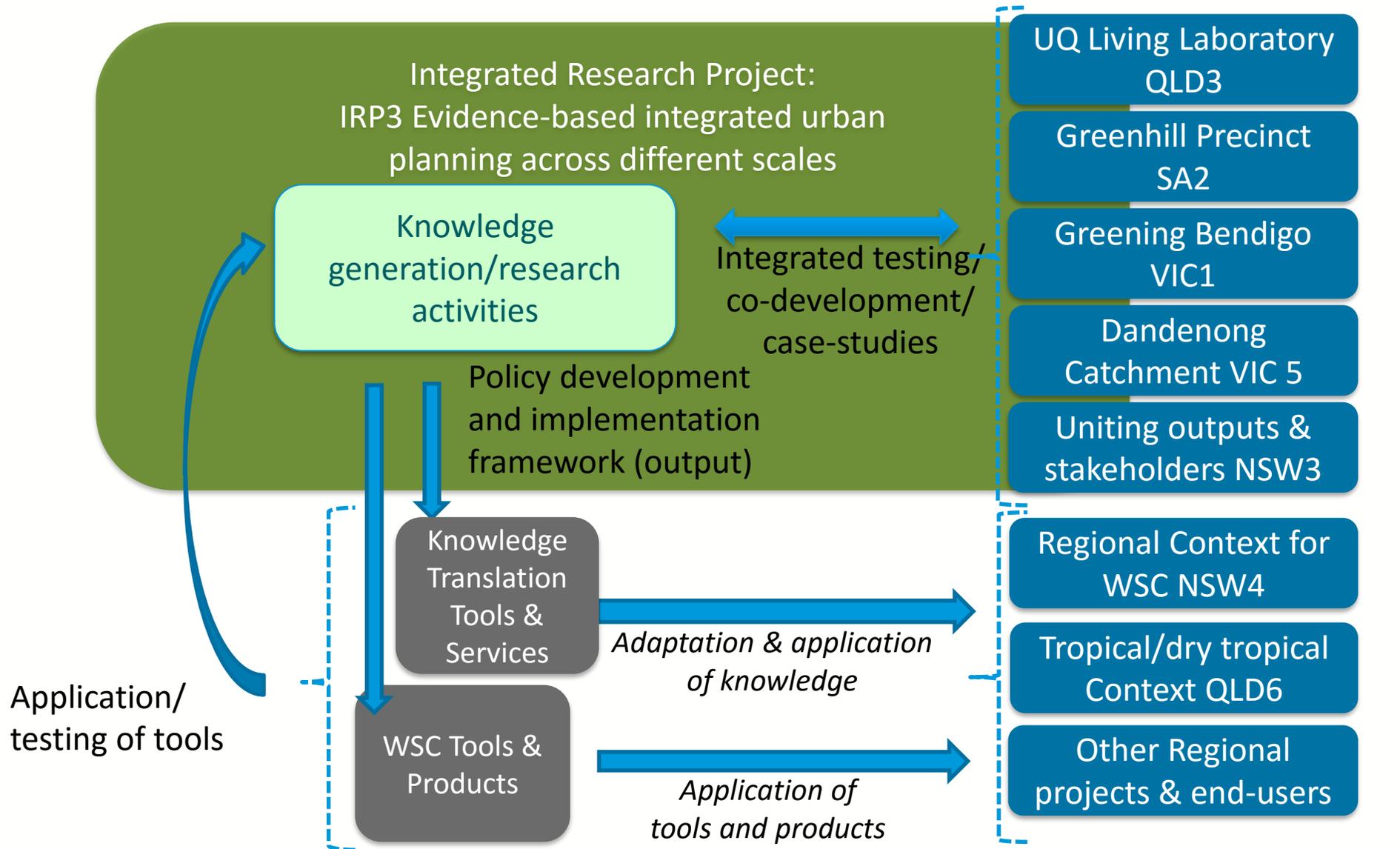
## **IRP4: Achieving WSC outcomes for in-fill developments**

- **Aim:** Developing solutions that deliver overall beneficial WSC outcomes for in-fill developments at different scales
- **Output:** Innovative solutions and integrated strategies across policy, regulatory, financial, technology and community approaches to achieve positive WSC outcomes for in-fill developments

## **IRP5: Knowledge-based WSC solutions for groundwater impacted developments**

- **Aim:** Understanding the impact and generating WSC solutions for developments in regions with high groundwater tables.
- **Output:** Guidelines and innovative solutions that achieve effective WSC outcomes for groundwater impacted developments

# Example of Project Interactions



# 2016/17 Integrated Research Project (IRPs)

- WSC Transition Strategies (IRP1)
  - Project approved at August Board Meeting
  - Draft Transition Strategies completed by July 2017
- Economic Framework (IRP2)
  - Related Tranche 1 Projects will be completed by July 2016
  - Project approved at November 2016 Board meeting
  - Draft framework and tool by end 2017
- Remaining projects (IRP3, IRP4, IRP5)
  - Related Tranche 1 Projects will be completed by July 2017
  - Project Proposal developed during 2016/17
  - Projects approved at May 2017 Board meeting

# 2016/17 Activities of Tranche 1 Projects

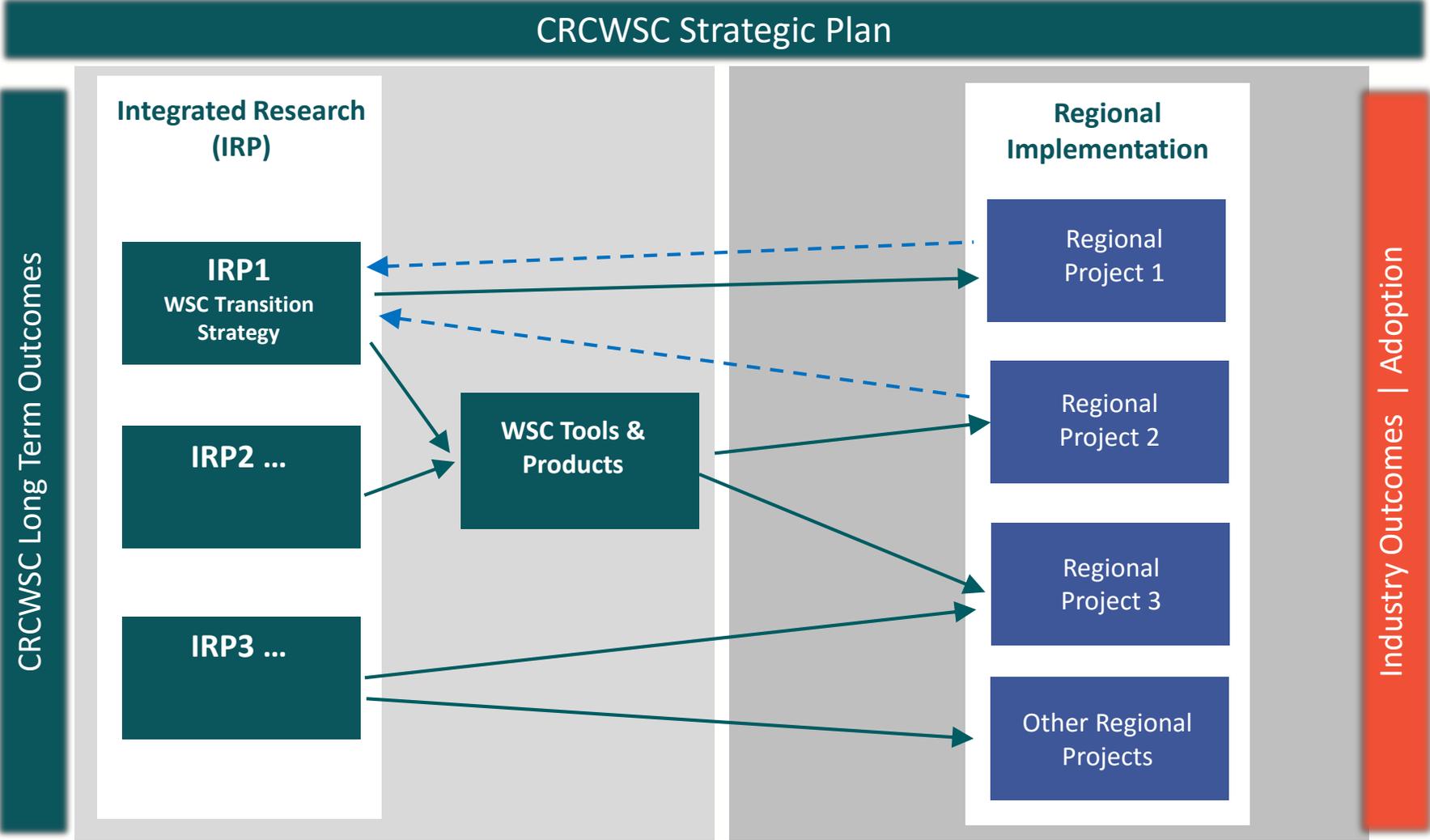
T1 project teams should assess opportunities for the application of Tranche 1 project outputs into the 'Project Ideas' identified by the RAPs and their potential transition into Tranche 2 projects

Tranche 1 Projects with significant continuing activities in 2016/17 are :

- A4.2 – Mapping WSC scenarios
- B1.2 – Catchment-scale landscape planning for WS Cities-regions
- B2.2/3 – Protection & restoration of urban freshwater ecosystems
- B4.1&B4.2 – Socio-technical flood resilience in Water Sensitive Cities
- C2.1 – Resource recovery from wastewater
- C3.1 – Managing interactions between decentralised & centralised water systems
- C4.1 – Integrated multi-functional urban water systems
- C5.1 – Intelligent urban water systems
- D5.1 – Urban intensification & green infrastructure towards a WSC

Total ongoing T1 project funding just over \$3M in 2016/17

# WSC Tools and Products



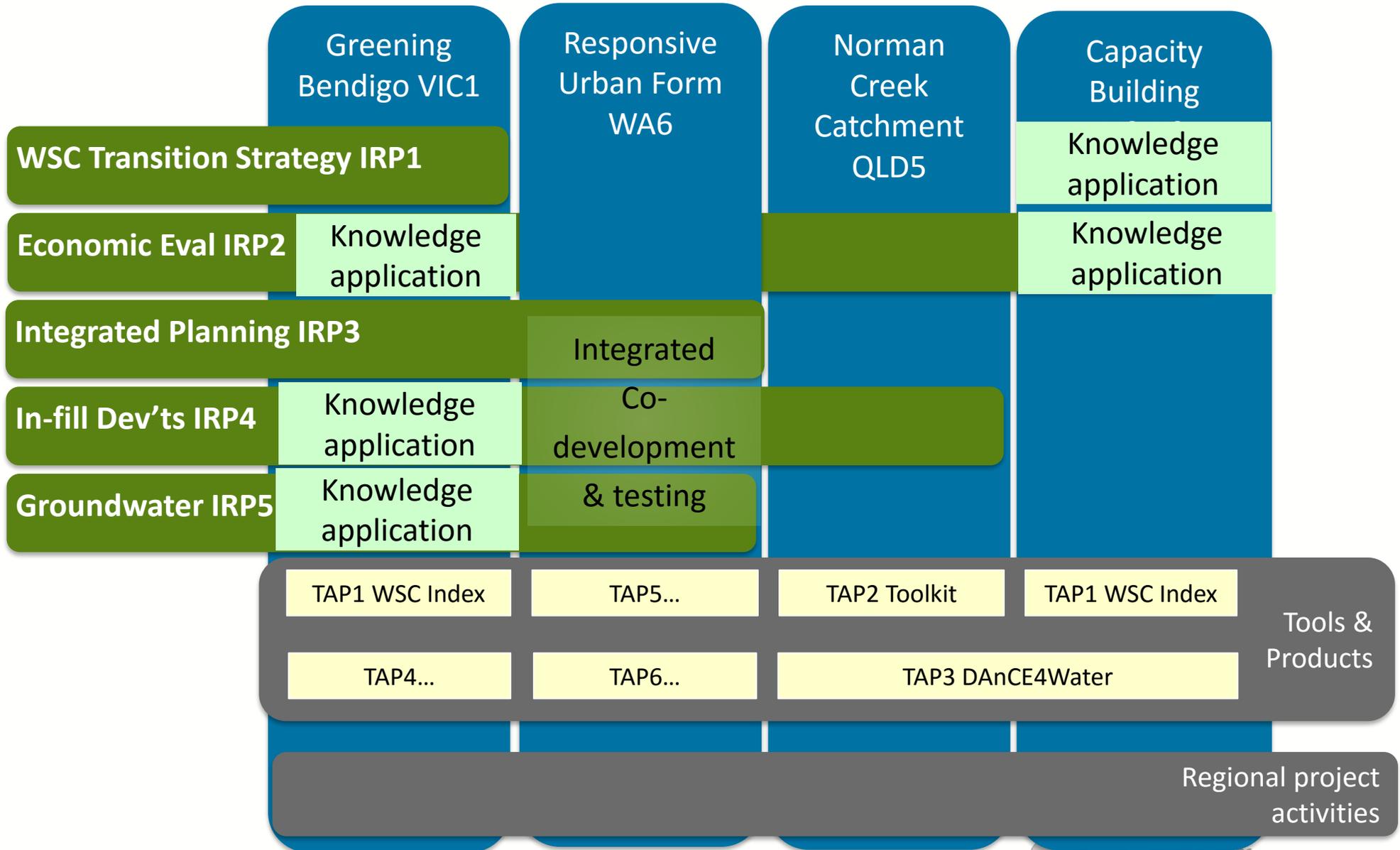
# Proposed Tools and Products (TAP)

- This activity area and related projects will need to be further developed over the coming months, also in conjunction with the assessment of the Tranche 1 outcomes and how to further develop/translate/apply these.
- 2016/17 funding will complete the development of the following tools, including testing (and capacity building) in pilot projects and synthesis activities:
  - **WSC Index**
  - **WSC Toolkit**
- The following Tranche 1 Tools and Products will also be tested, during 2016/17, in projects and synthesis activities:
  - **DAnCE4Water modelling tool**
  - **Urban microclimate model**
- Other Tools and Products from Tranche 1 Project outputs will be further evaluated as they are completed over coming months.

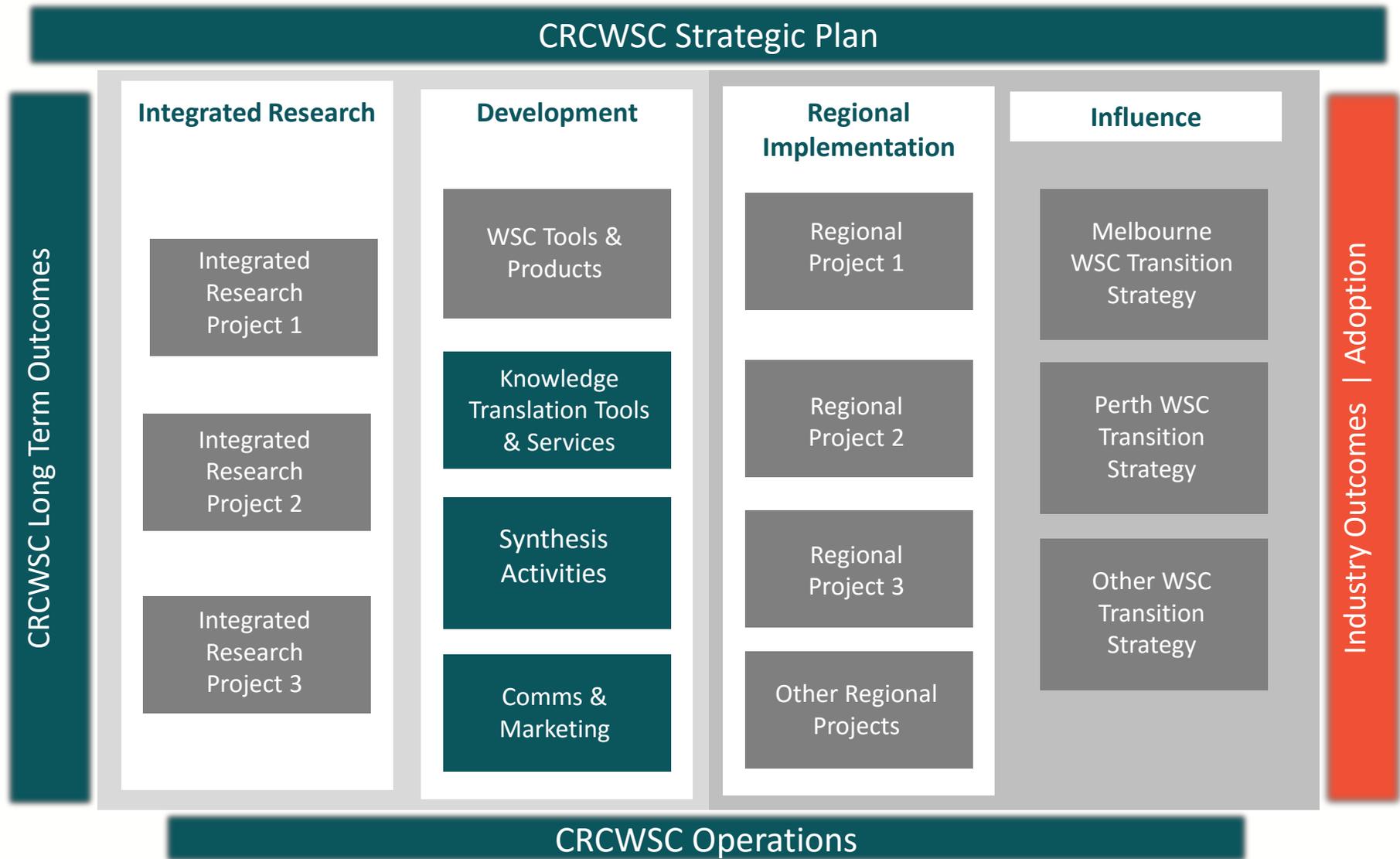
# Regional Projects

- Based on specific, **local project idea or opportunity** proposed by one RAP;
- CRCWSC activities/outputs are expected to **add valuable knowledge and tools/solutions** to emerging or active projects driven by local stakeholders;
- **Transferability of outcomes** to other regions important, groups of related Regional Projects may be formed to foster shared application and adoption of knowledge;
- Some Regional Projects will have **significant interactions** with key research activities in the Integrated Research (IRP) projects, but not all REG project elements will be covered from these knowledge generation activities;
- The focus of non-research elements (ie. not covered in IRP projects) is primarily on **knowledge application and implementation**, including application of Tools and Products (TAP) as well as (ongoing) T1 activities/outputs to the particular local situation/needs;

# Example of Integration of Regional Projects with IRPs and Tools&Products



# Tranche 2 Activities



# T1 & T2 Development Activities

Additional project types/activities that focus on the translation of the research and building the capacity of stakeholders. These activities may (or may not) provide commercial opportunities. These activities can be grouped as follows:

- **Knowledge Translation Tools & Services** – a range of support or enabling activities co-designed with industry including capacity building, knowledge resources, policy influence, knowledge dissemination etc..
- **Research Synthesis Projects** – both CRCWSC and partner funded knowledge sharing and integrating workshops that have the potential to provide foundations for on-going CRCWSC activities
- **Communications and Marketing** –multiple forms of communication (e.g. website, newsletters, Industry Partner Workshops, WSC Conference etc. used to inform and influence stakeholders on the products and tools of the CRCWSC and the value of WSC solutions

# 2016/17 Knowledge Translation Tools & Services

## Capacity Building

- Collaboration and co-delivery between RAP and capacity building organisations and centers'
- Knowledge translation – guidelines, policy notes, case studies
- Demonstration projects and case studies
- Evaluation and learning framework

## Policy influence

- Linking in with IRP1 – proactive support for key policy enhancement

## Education and Training

- PhD support & capacity building
- PhD training/retreat
- Professional development and post-graduation education

# Synthesis Activities

Five Partnership Workshops planned at least, including:

- Norman Creek (QLD)
- Bays Precinct (NSW)
- Arden Macaulay (VIC)
- Pinja South (WA)

Plus five 'Full Fee' Synthesis Workshops such as:

- Southbank (QLD)



CRC for  
**Water Sensitive Cities**

**2012 - 2021**

