



CRC for
Water Sensitive Cities

Tranche 2 Update

SA RAP meeting 24 Aug 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...)
- Proactively contribute to policy reform processes
- Initiating the first Tranche 2 projects and development of the on-going program
- Testing and enhancing WSC Tools and Products
- Commence development of regional WSC Transition Strategies
- Evolution of the Regional Advisory Panels
- Continue research synthesis activities 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 1 Projects continuing in 2016/17

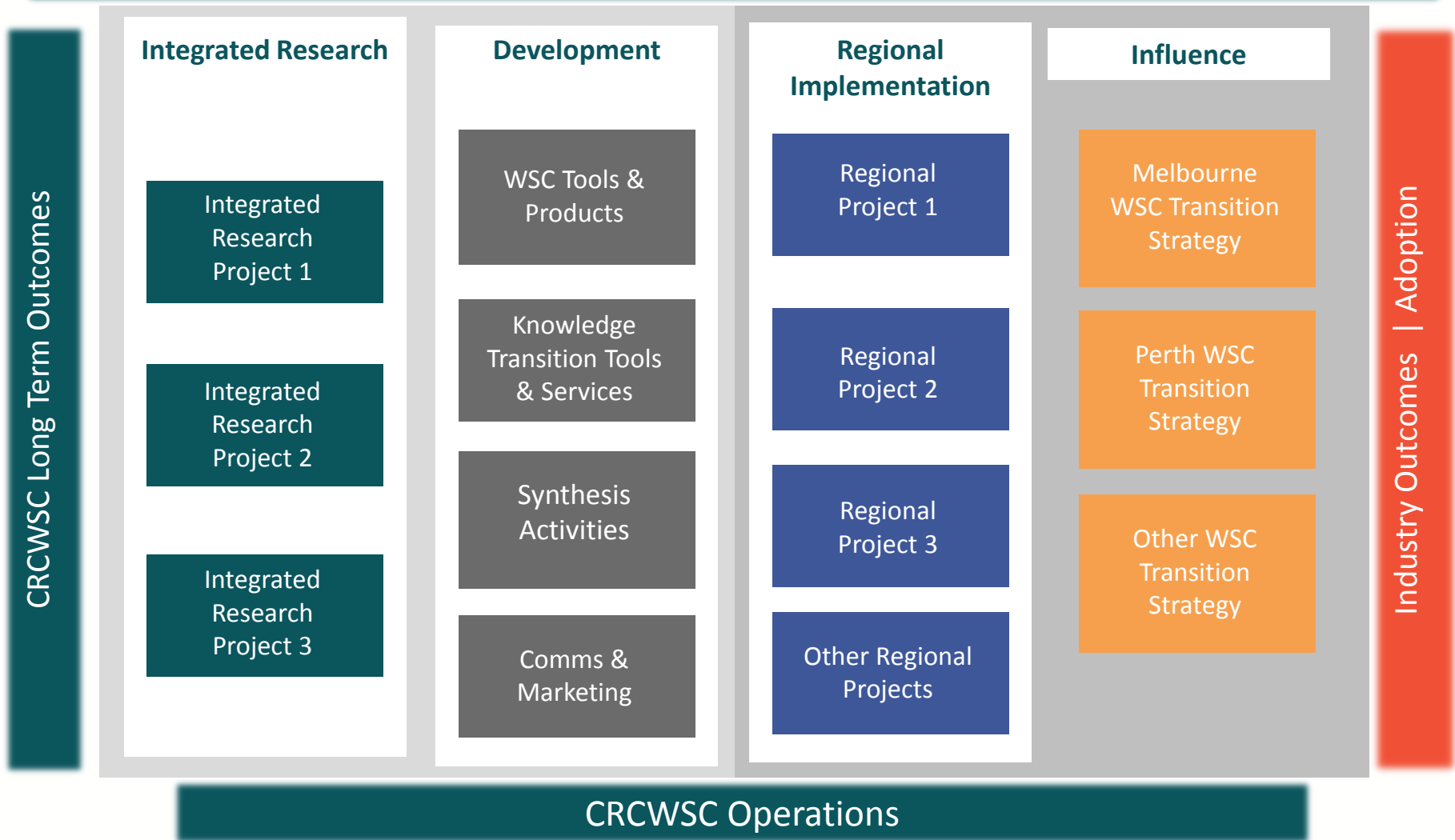
Current project teams will assess opportunities for the application of Tranche 1 project outputs into the 'Project Ideas' identified by the RAPs and their transition into Tranche 2 Projects

Key Tranche 1 Projects continuing 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
- 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

Tranche 2 Projects and Activities

CRCWSC Strategic Plan



Tranche 2 Project Types

- Project Teams will comprise both industry and research members
- Four types of T2 Projects are proposed to be developed from the RAP project ideas and the Research Activities:
 - **Integrated Research Projects (IRP)** – national projects and researcher lead
 - **WSC Tools & Products Development Projects (TAP)** – examples are DAnCE4Water, integrated WSC Toolkit and WSC Index, industry or researcher lead and will have potential commercial value
 - **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** – a national WSC Transition Strategy framework, researcher lead, that will be tailored to the local situation. Local WSC Transition Strategies will be RAP led and managed by the Regional Manager

Tranche 2 Project Development

- National priorities of Research Activities based on RAP feedback
 - Overall Priorities of Research Activities across all RAPs

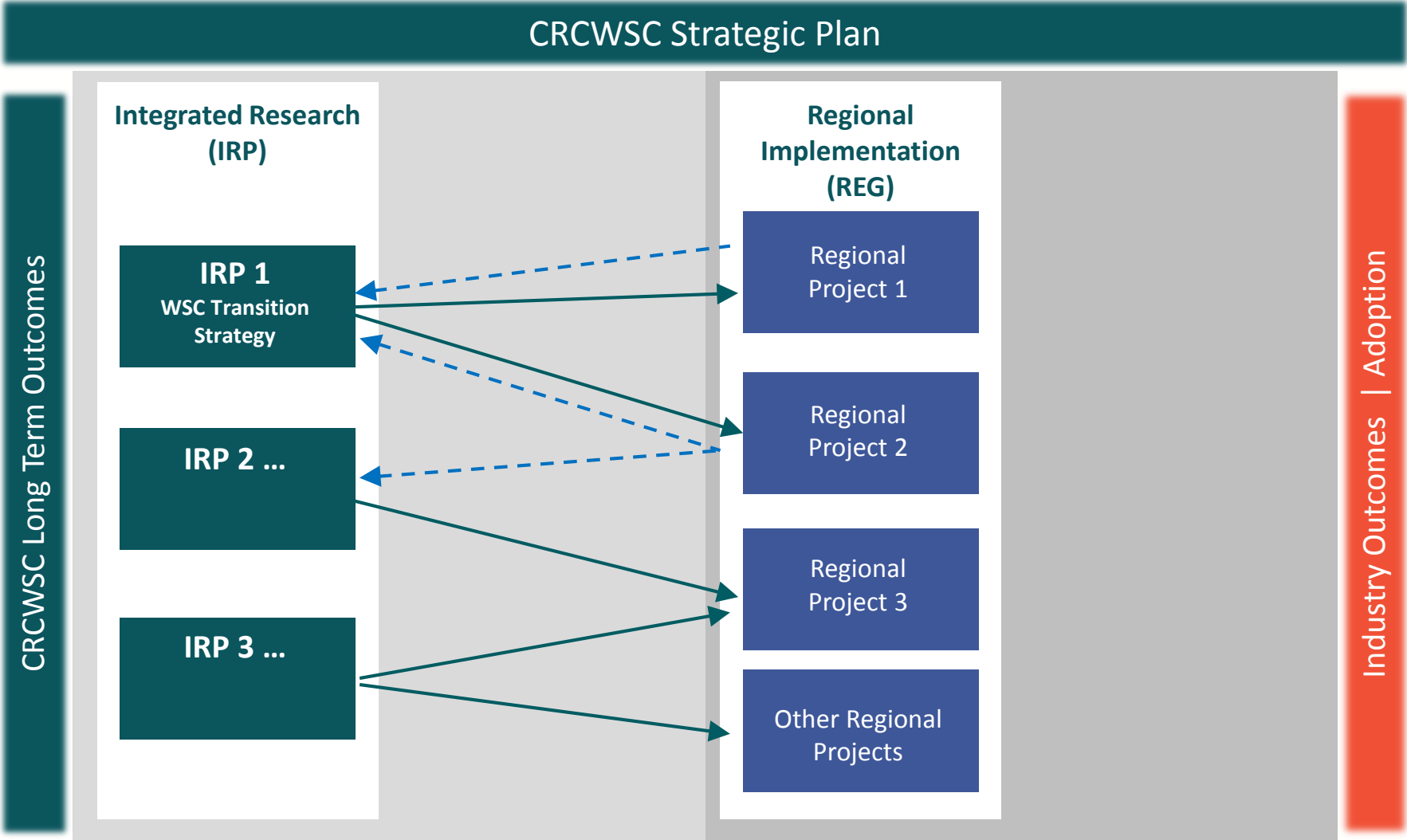
Ranking*	Research Activity No.	Title
Very high	1.3	Developing community support for water sensitive innovation
Very high	5.1	Economic values, evaluation and incentives
High	1.4	Strategic policy influence for water sensitive cities
High	2.2	Integrating WSC values across urban planning, urban design and 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

- National priorities of Research Activities based on RAP feedback
 - Other identified Research Activities of importance to particular RAPs

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

Tranche 2 Project Structure



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:

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

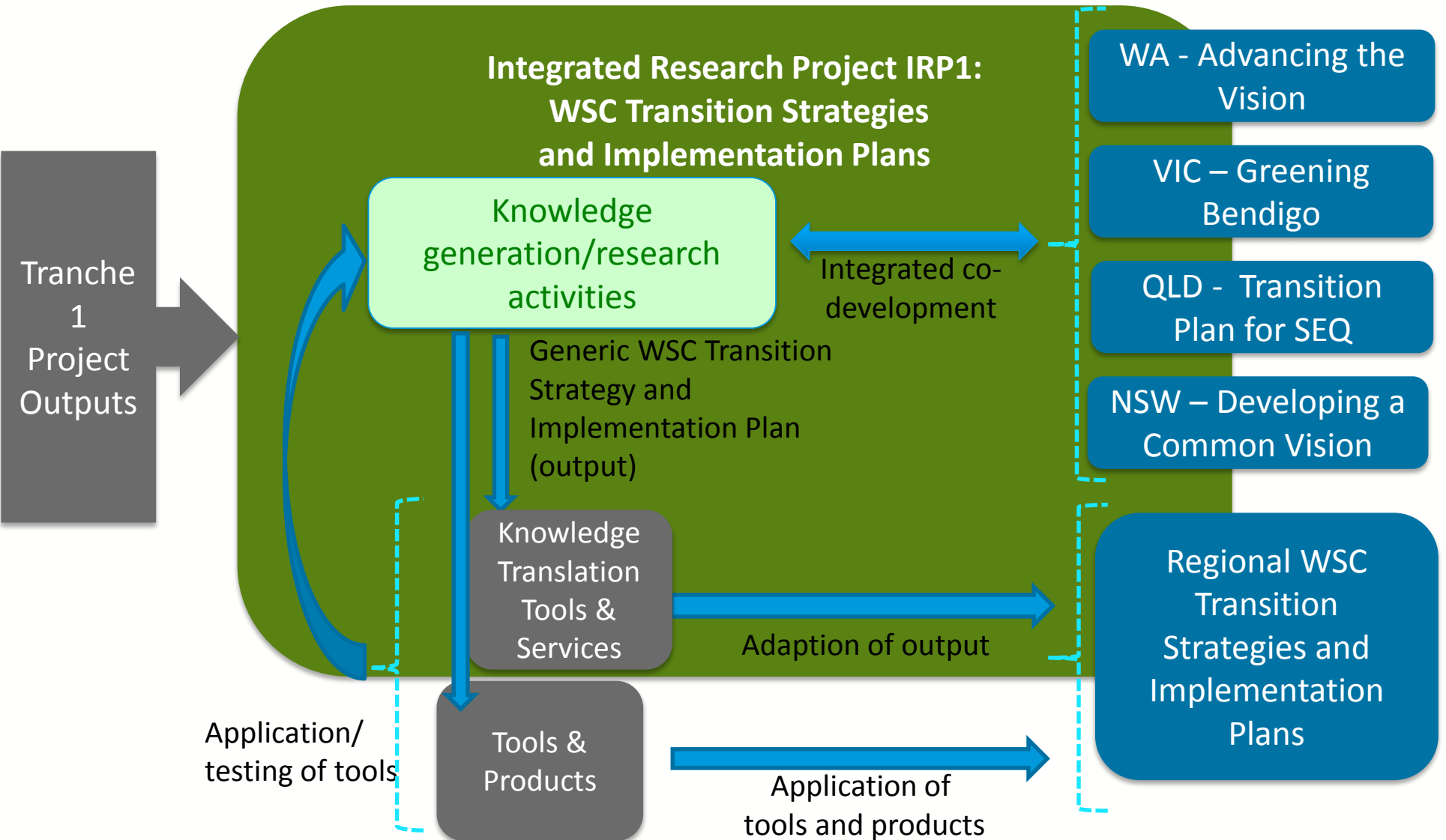
IRP4: Achieving WSC outcomes for in-fill developments

- **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

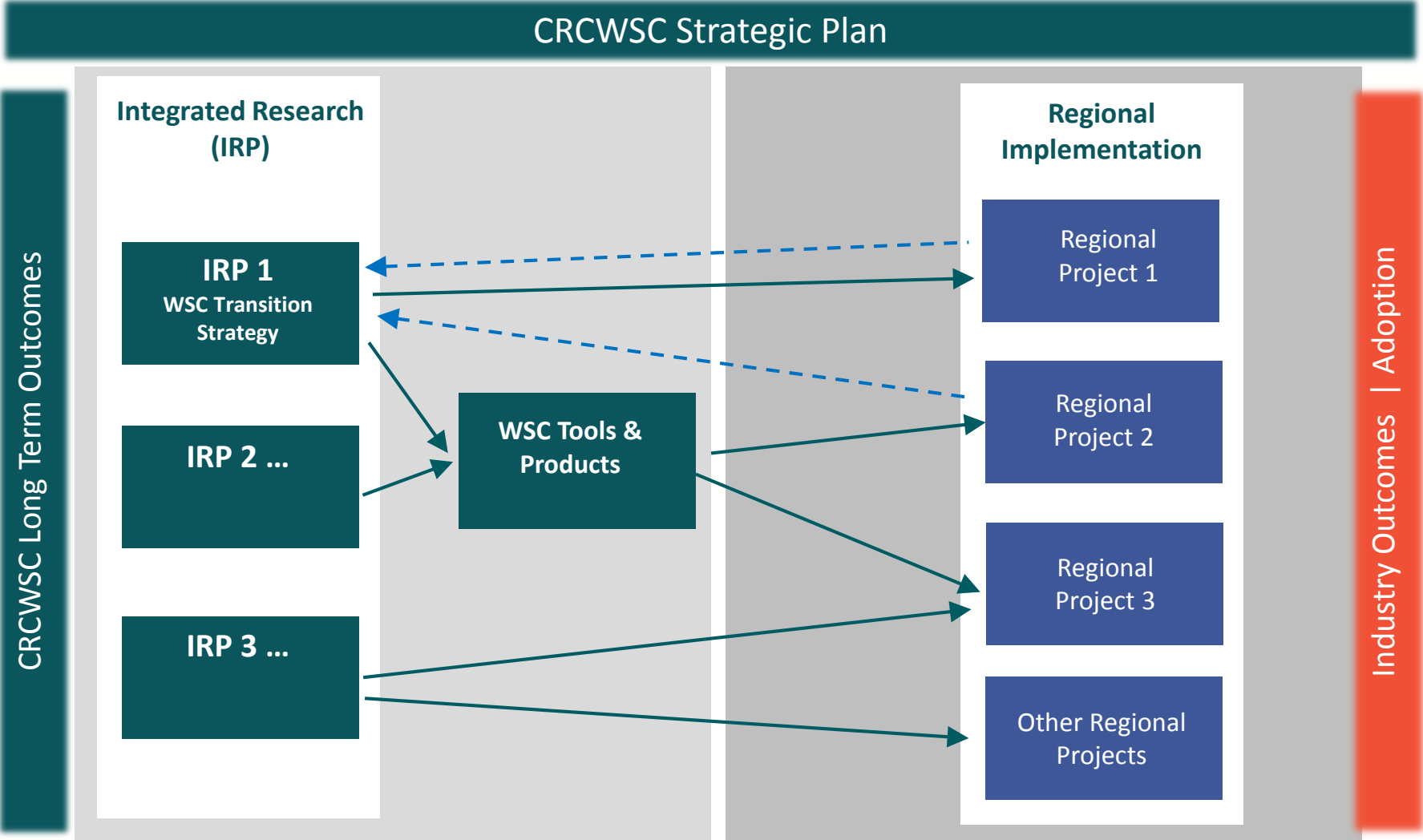
Example of Project Interactions – IRP1



Proposed Tools and Products (TAP)

- 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 and industry needs

Tranche 2 Tools and Products



Tranche 2 Development Timeline FY1617

Project/Program	Q1	Q2	Q3	Q4
IRP1: WSC Transition Strategies	AC & EPRG Reviews; Board approval	Commencement		
IRP2: Economic Evaluation Framework	Planning/proposal development	AC & EPRG Reviews; Board approval	Commencement	
IRP3: Integrated Urban Planning		Scoping and planning	Proposal development	AC & EPRG Reviews; Board approval
IRP4: In-fill Developments		Scoping and planning	Proposal development	AC & EPRG Reviews; Board approval
IRP5: WSC Solutions for Groundwater-affected areas		Scoping and planning	Proposal development	AC & EPRG Reviews; Board approval
Tools and Products (TAP) Program	Planning/proposal development	AC & EPRG Reviews; Board approval	Commencement	

Examples of Regional Project Structures

