



Cooperative Research Centre for  
**IRRIGATION FUTURES**

# Urban Irrigation

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# Projects relevant to local government

1. Sustainability reporting tool
2. Water use & efficiency study - Sydney
3. Western Sydney Regional Irrigation Business Partnerships (RI BP)
4. Student research
5. CRCIF – website, INFLO









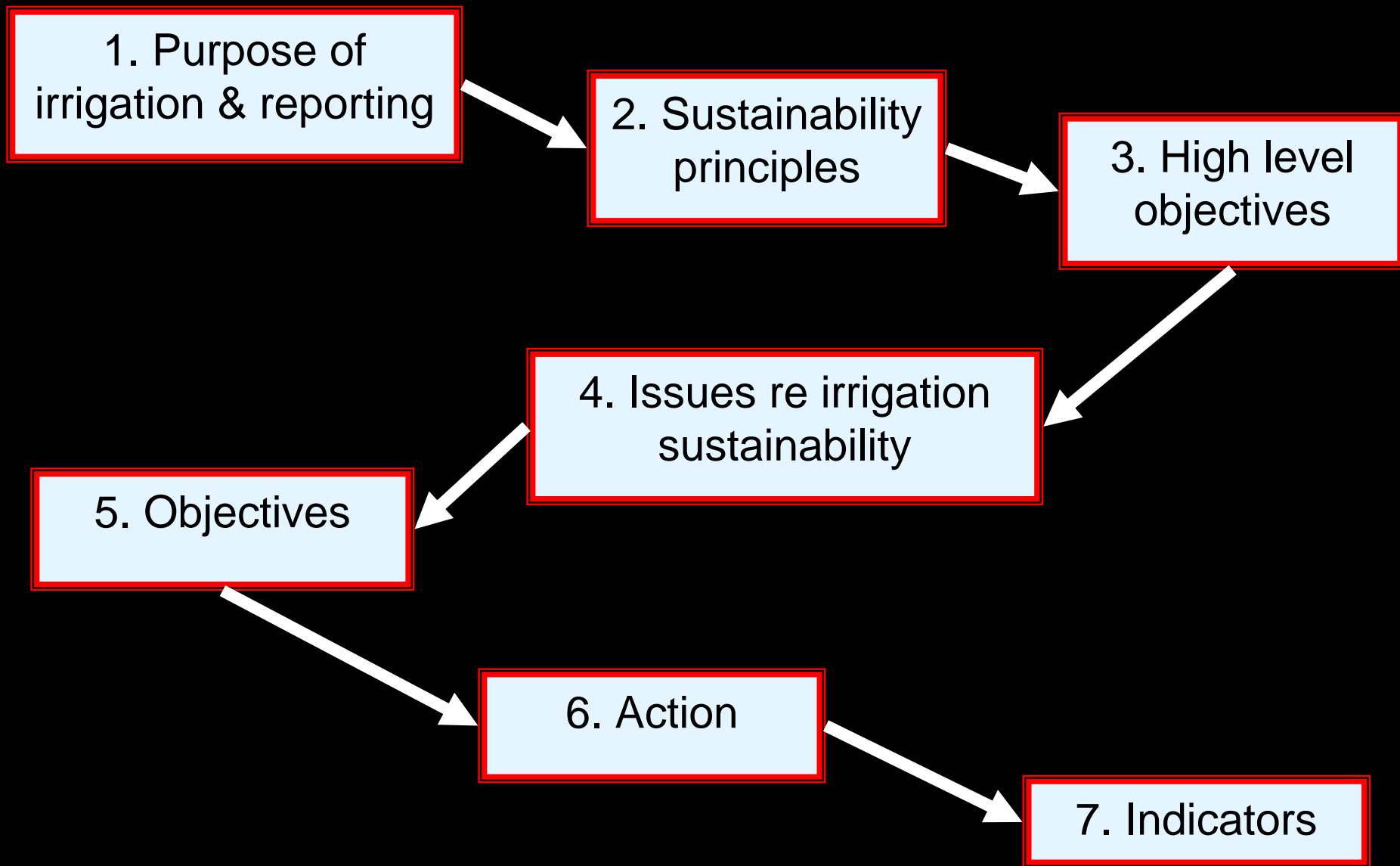




# 1. Sustainability reporting tool

- Evidence that improved assessment & reporting leads to improved management and long term availability of resources – sustainability
- Study showed limited records of water used and communication about urban irrigation – 17 organisations
- Water restrictions and public criticisms
- Developed tool that is used annually to help with communication, planning and reporting between key staff in council - Time =15 hours/year
- Can be used for State of Environment Reporting





Issues that impact on sustainability	Key indicators (5) always use	Other Indicators (18)
1. Water use	Water use per unit area	
	Non-potable volume used	
2. Social outcomes		Recreation activity use
3. Economic outcomes		Income
4. Surface performance	Surface quality	
5. Soil health		Soil compaction (Penetrometer)
6. Environment protection		Nutrient runoff
7. Organisation capacity	Training	

# Products & Services

- Information pack - \$30
  - step by step instructions for running process
  - access to website
  - project reports
- 1 day training workshop for running process  
\$100 per organisation – minimum 8 orgs.
- Train the trainer licence \$1000



# 2. Sydney Water Use & Efficiency Study

## Key findings

- average outdoor water: 34% of total water use and 392 litres/ day/home site. Figure varies widely
- water use for gardens twice that for lawn  
garden areas use 2/3 total irrigation water use although they represent half total area irrigated
- importance of irrigation system maintenance and education of homeowners for proper irrigation scheduling in water conservation
- homeowners have limited understanding of plant water needs - 1/3 of sites had twice the necessary water applied.



# 3. Regional Irrigation Business Partnerships

- The Western Sydney RI BP is investigating pathways for substituting fresh water use with recycled water while improving the water productivity in the catchment
- Engaging stakeholder and agencies for developing and implementing integrated water resources plan
- Stakeholders include – Irrigators, WSROC, Greater Western Sydney Economic Development Board, Fishing industry, Turf industry and NSW Farmers Federation
- Agencies: DNR, SCA, Dept. of Planning, Health, DEC etc
- Researching - water cycle, markets, social and policy frameworks, business opportunities



## 4. Student research

- Melanie Schwecke  
Sustainable use of recycled water  
for irrigation on golf courses  
- Case Study Manly Golf Course
- Bhakti Lata Devi  
Mapping & understanding urban  
irrigation water use
- Honours students – value of public openspace



## 5. Resources

- Website – projects, research, people, students, activities, training
- INFLO – newsletter emailed monthly



# THANK YOU

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## **PARTNER ORGANISATIONS**

Victorian Department of Primary Industries

University of Western Sydney

University of Southern Queensland

University of South Australia

University of New England

University of Melbourne

Sun Water

South Australian Research and Development Institute

South Australian Department of Water, Land and Biodiversity Conservation

Queensland Department of Natural Resources, Mines and Water

New South Wales Department of Primary Industries

Goulburn-Murray Water

CSIRO

Charles Sturt University

Australian Government Land and Water

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The Cooperative Research Centres (CRC) Programme was established to bring together researchers and research users. The programme emphasises the importance of collaborative arrangements to maximise the benefits of research through an enhanced process of utilisation, commercialisation and technology transfer. It also has a strong education component with a focus on producing graduates with skills relevant to industry needs. It is run by the Department of Education, Science and Training, Canberra.



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