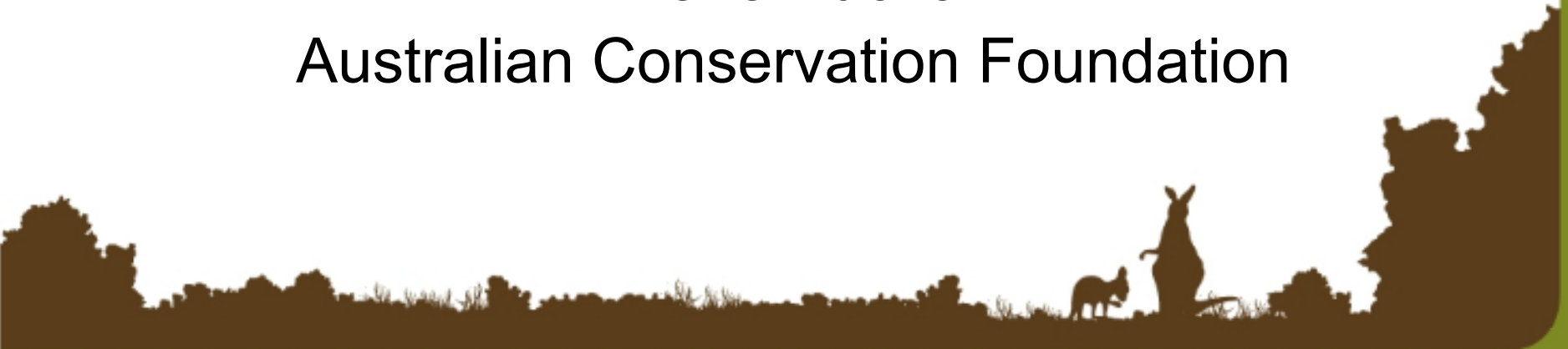


Water Reform and Environmental Outcomes - How Will We Measure Progress?

Arlene Buchan
Australian Conservation Foundation



Water Reform Process

- COAG Agreement (1994)
- Living Murray Initiative
- National Water Initiative (2004)
 - ‘National blueprint’ for water reform
 - All other Acts, agreements, policies etc must comply
- National Plan for Water Security (2007)
 - \$10bn with focus on: overallocation; irrigation efficiency; improved governance and data

What is the crux of the problem?

- MDB - history of poor policy:
 - Over-extraction
 - 90% wetlands gone
 - Fish, birds & tree health in decline
 - Median flow at the mouth <25% of natural
 - Water quality
 - All values at risk



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- Drought
- Climate change



The crux of the problem is:

- Overallocation: aka overuse, overdevelopment, overextraction...resulting in:
 - Lack of environmental flow
 - Inappropriate flood frequency, duration, seasonality
 - Ecological decline, damage to resource base
- Failure to address overallocation will render other investment redundant

Biophysical indicators of adequate flow regimes

- Ecosystem functioning; viable populations of dependent species & communities
 - Very long lag-times involved
- Environmental flow indicators:
 - Colonial water-bird breeding events, fish spawning, River red gum canopy condition
- Need better:
 - Baseline data
 - Monitoring and evaluation
 - Science generally...
 - Environmental management (authority, \$\$)

Adequacy of the Policy Setting for Addressing Overallocation

- NWI: *'implement firm pathways and open processes for returning overallocated systems to environmentally sustainable levels of extraction'* [S25(v)] using
- *'the most effective and efficient mix of water recovery measures'* including *'investment in efficient water infrastructure and purchase on the market...'* [S79(ii)]

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- Adequate – BUT...

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 - Scientifically credible targets and timelines

Policy Implementation Indicator

- *‘Environmental water should have at least the same degree of security...as irrigation water’...[S35(i)] BUT:*
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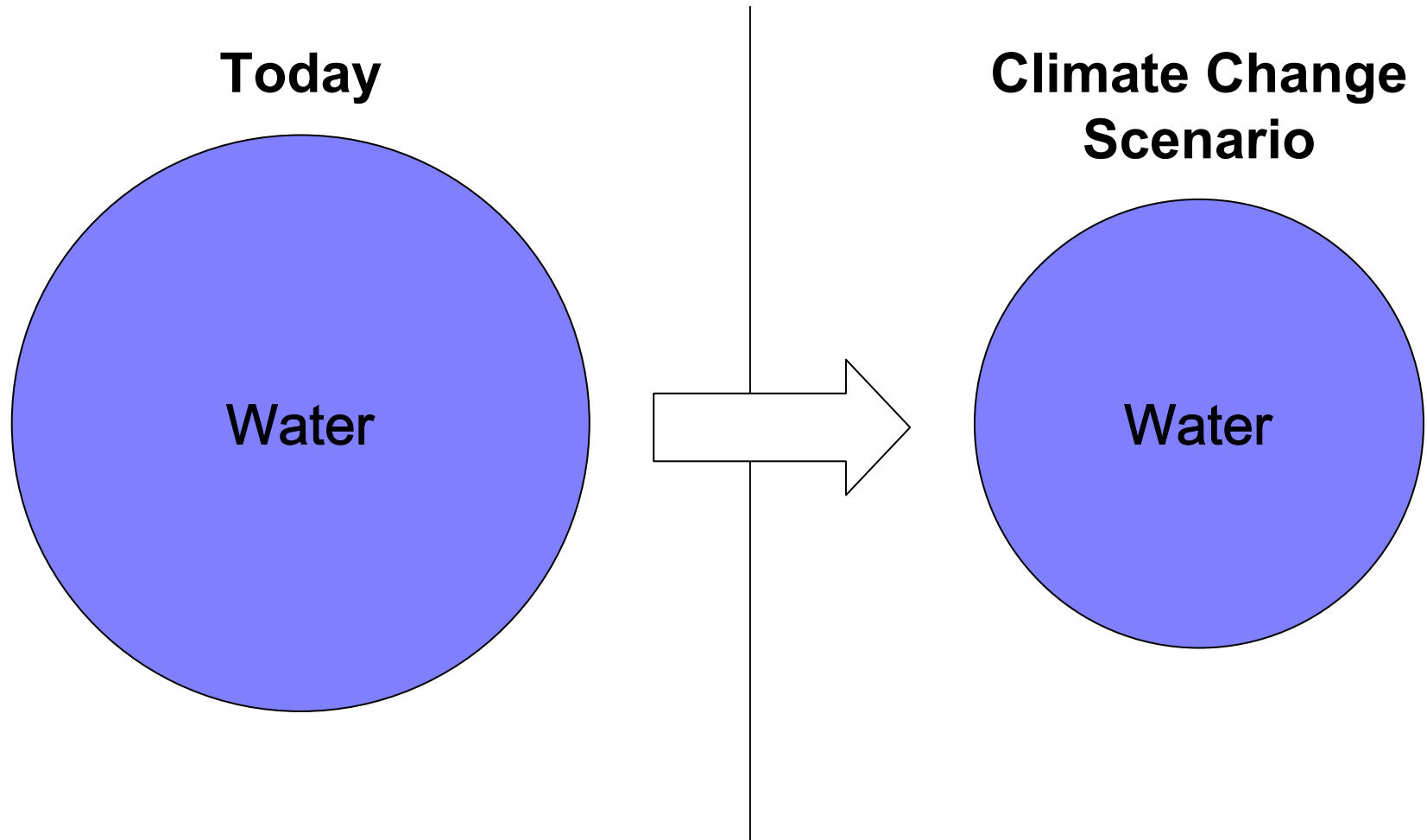
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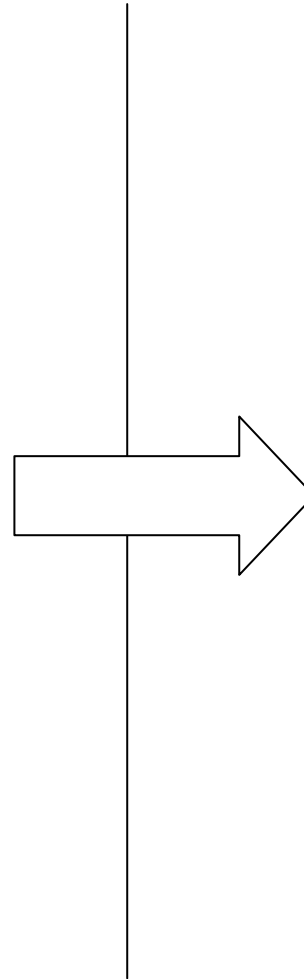
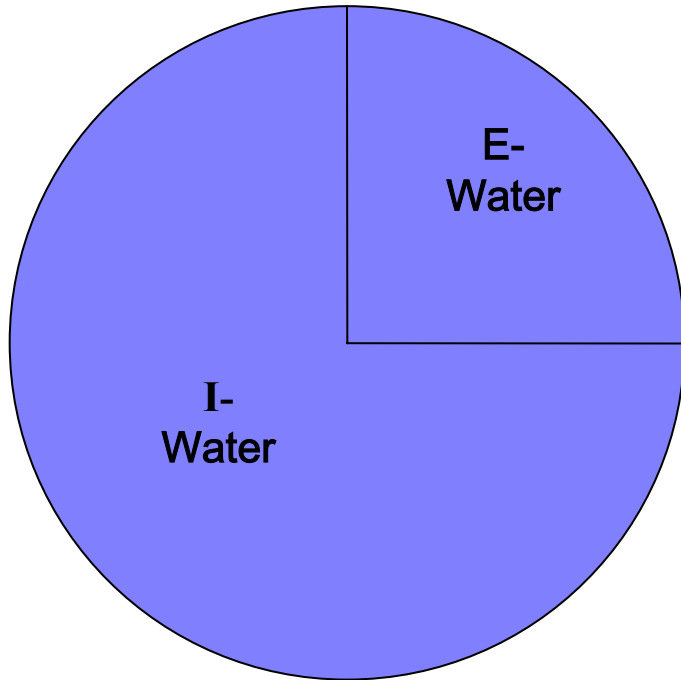
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 - Best science should determine e-water use

Climate change and total runoff in the MDB

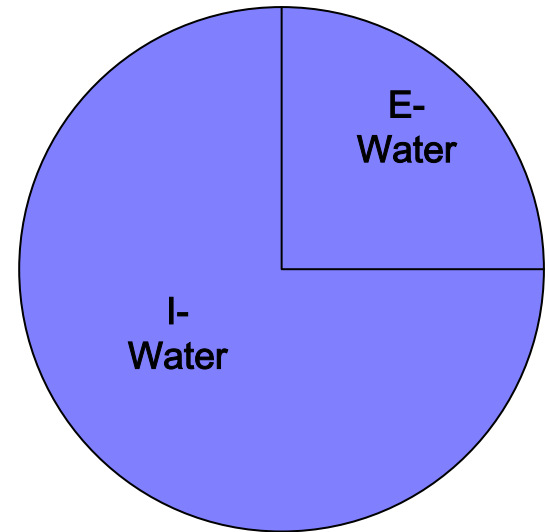


Proportional impact on shares of the total resource

Today

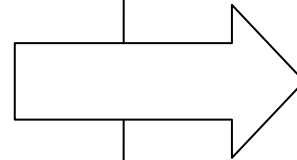
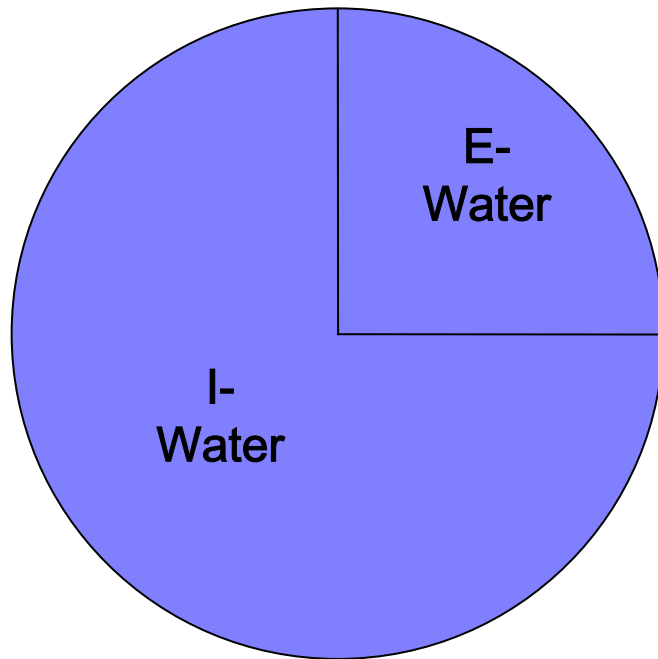


Climate Change Scenario

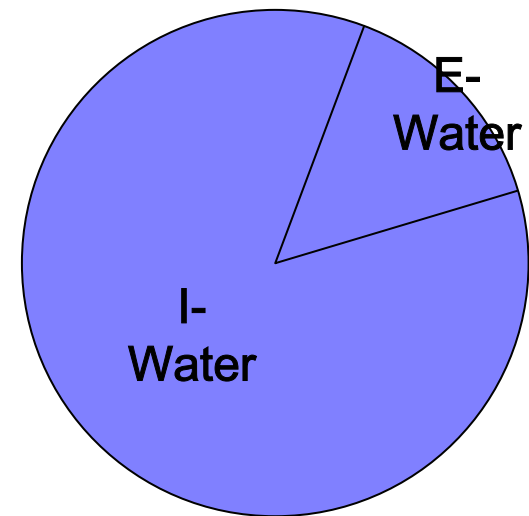


Actual impact on shares of the total resource

Today



Climate Change Scenario



Why?

- The environment gets lowest security water
 - The environment needs a secure entitlement to water
- Water reform must provide a trigger for re-adjustment of shares



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- Leadership & 2-way decision making

Will the water reform process work for the environment?

- We have:
 - Right policy setting and tools but implementation has been poor
- We need:
 - Accelerated implementation
 - Use all tools
 - Secure e-water
 - Better data and science
 - Strong leadership





‘Inspiring people to achieve a
healthy environment’

Thank You!



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