



Adapting to climate change: Lessons learnt from the Australian water experience

Presentation at the University of Colorado (the Buffalos)

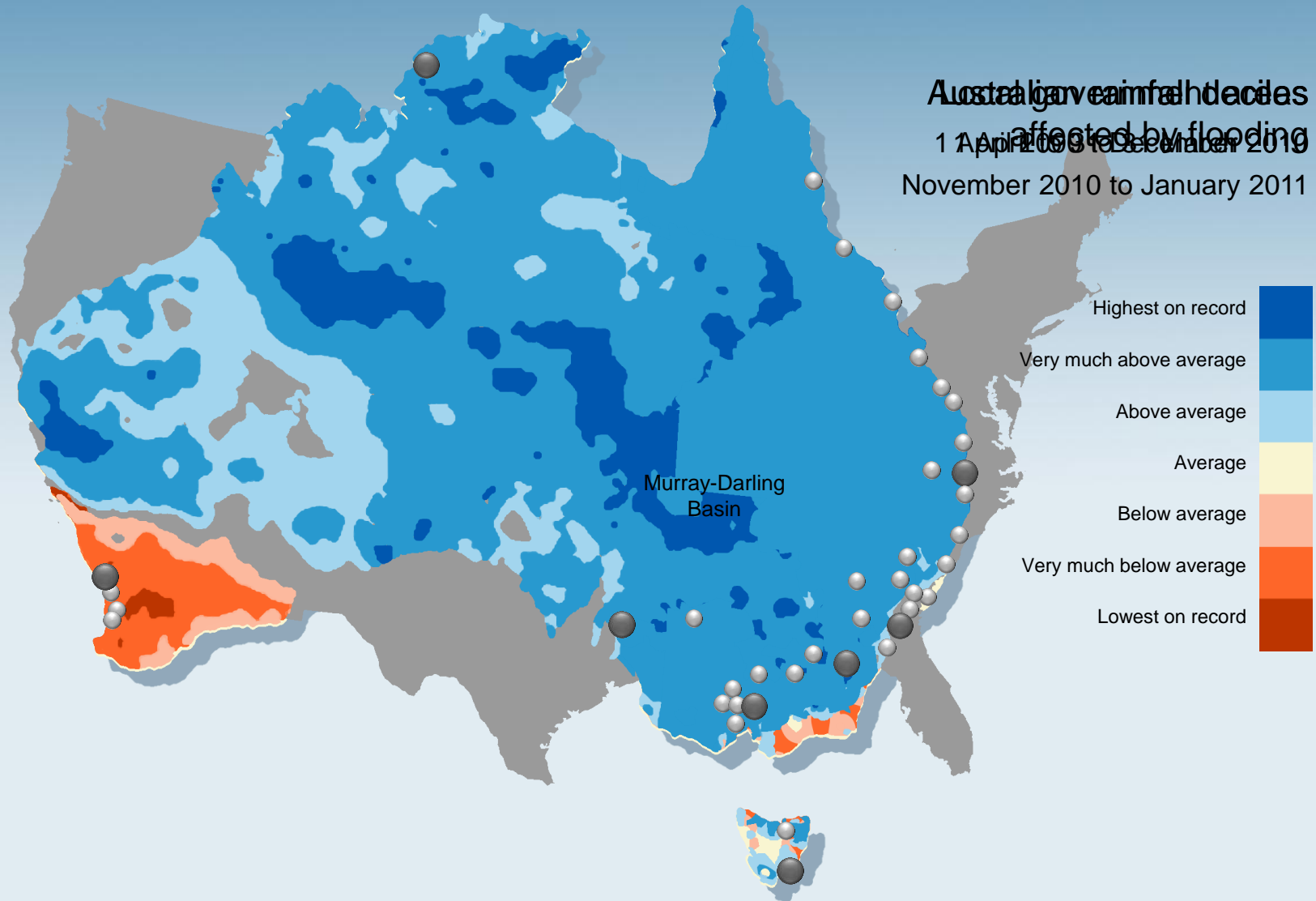
14 February 2010

Will Fargher, National Water Commission



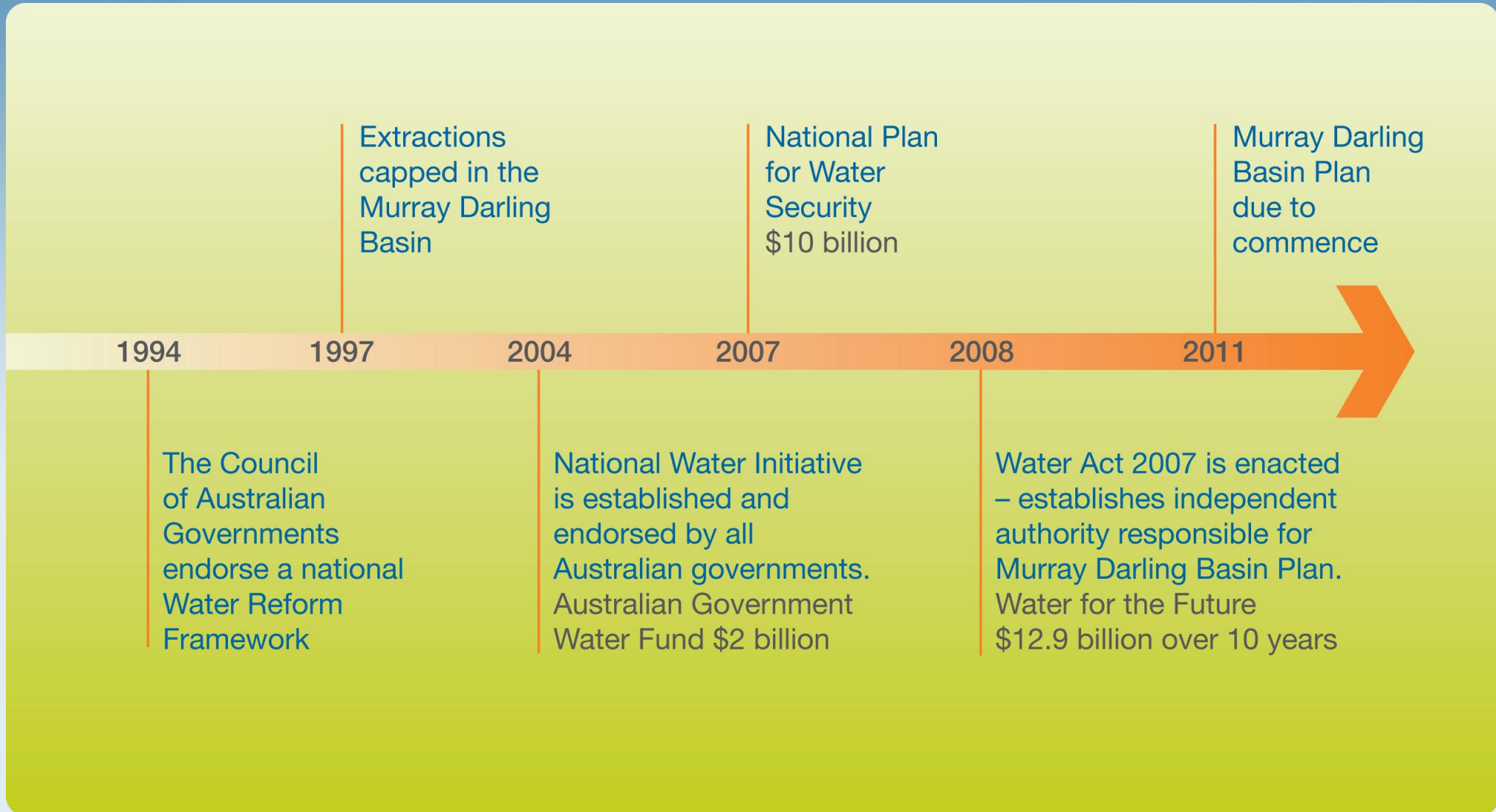


Australia's water resources





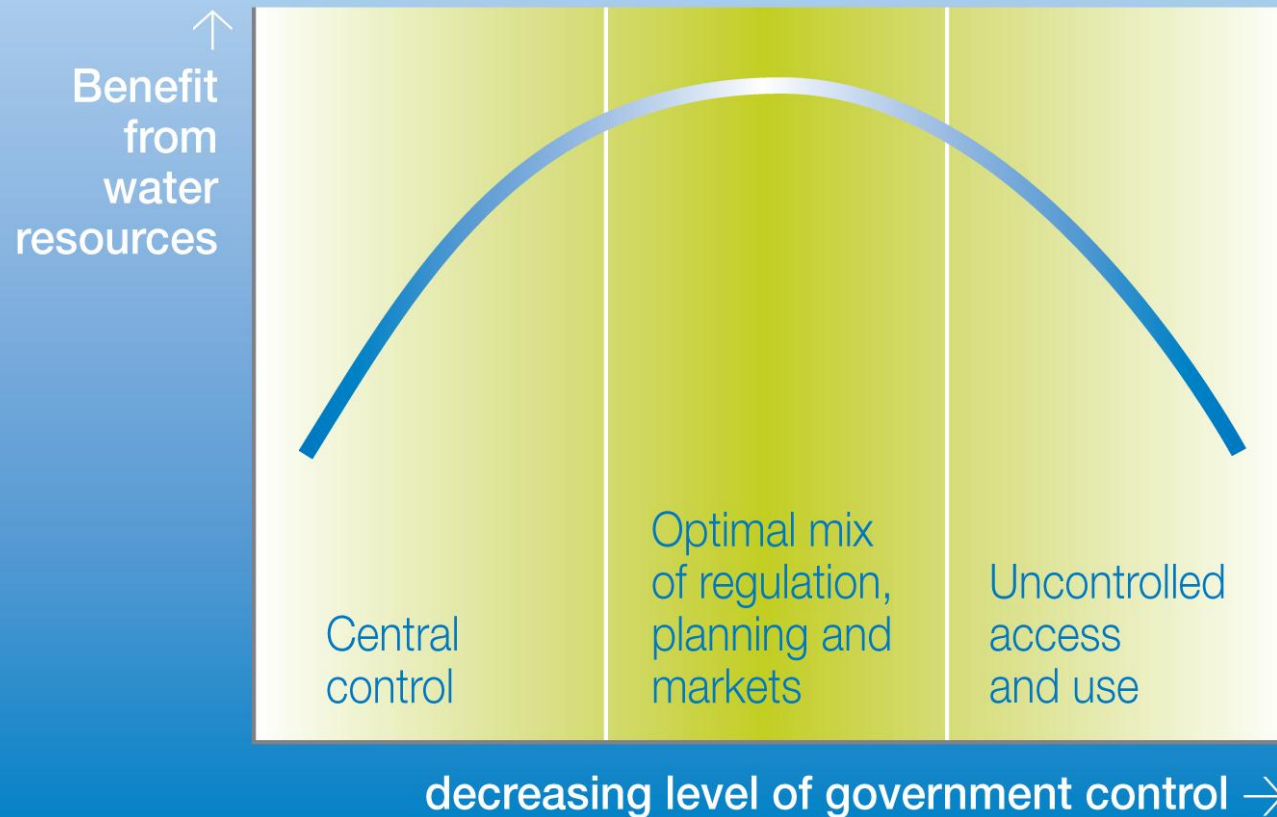
National policy developments



A nationally compatible market, regulatory and planning based system



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Fundamental NWI reforms

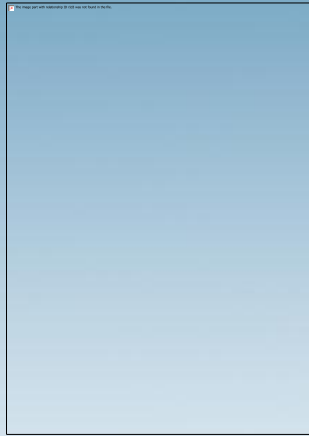


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- Unbundled water rights and markets
 - Clarity and security; efficient allocation; flexibility during challenging times
- Pricing and best practice institutional arrangements
 - Encourage efficient and sustainable water use; promote efficient investment; encourage innovation and ensure appropriate service delivery; manage externalities
- Environmental water management
 - Plans to include clear and measurable objectives and associated water required; secure entitlements; accountability in management and reporting



Some Commission assessment and information products



Biennial Assessment of Australian Water Reform

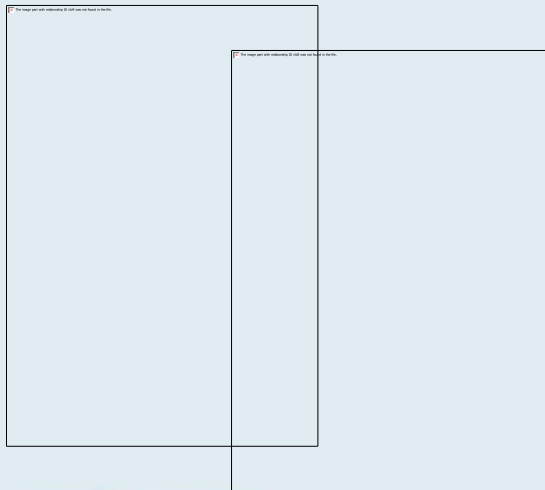
- First published in 2007
- Provides independent assessment of progress in water reform



Australian Water Markets Report

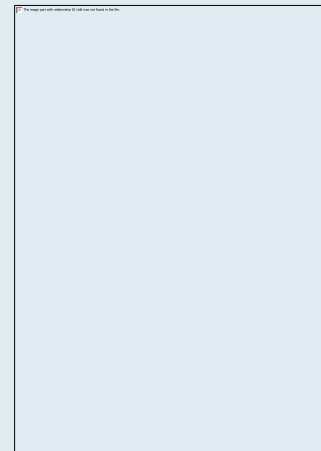
- Published annually (2008, 2009, 2010)
- Statement of market trends and activities
- Market performance as an institution

National Performance Reports (NPR)



- Published annually (2007,2008,2009)
- Reports on performance urban and rural water service providers

Impacts of water trading in the sMDB



- Published 2010
- Assessment of economic, social and environmental impacts in southern MDB
- Produced again in 2012



Achievements of tradable entitlements and markets

- Secure and transferable entitlements
- Major benefits in managing the drought, facilitating autonomous adjustment, accessing finance, and encouraging investment
- Realising benefits at farm, industry and regional level
- Total trade in 2009-10 of around \$3 billion
- Around 13% of total entitlement volume was traded in Australia in 2009-10



Water entitlement reform



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Water trading



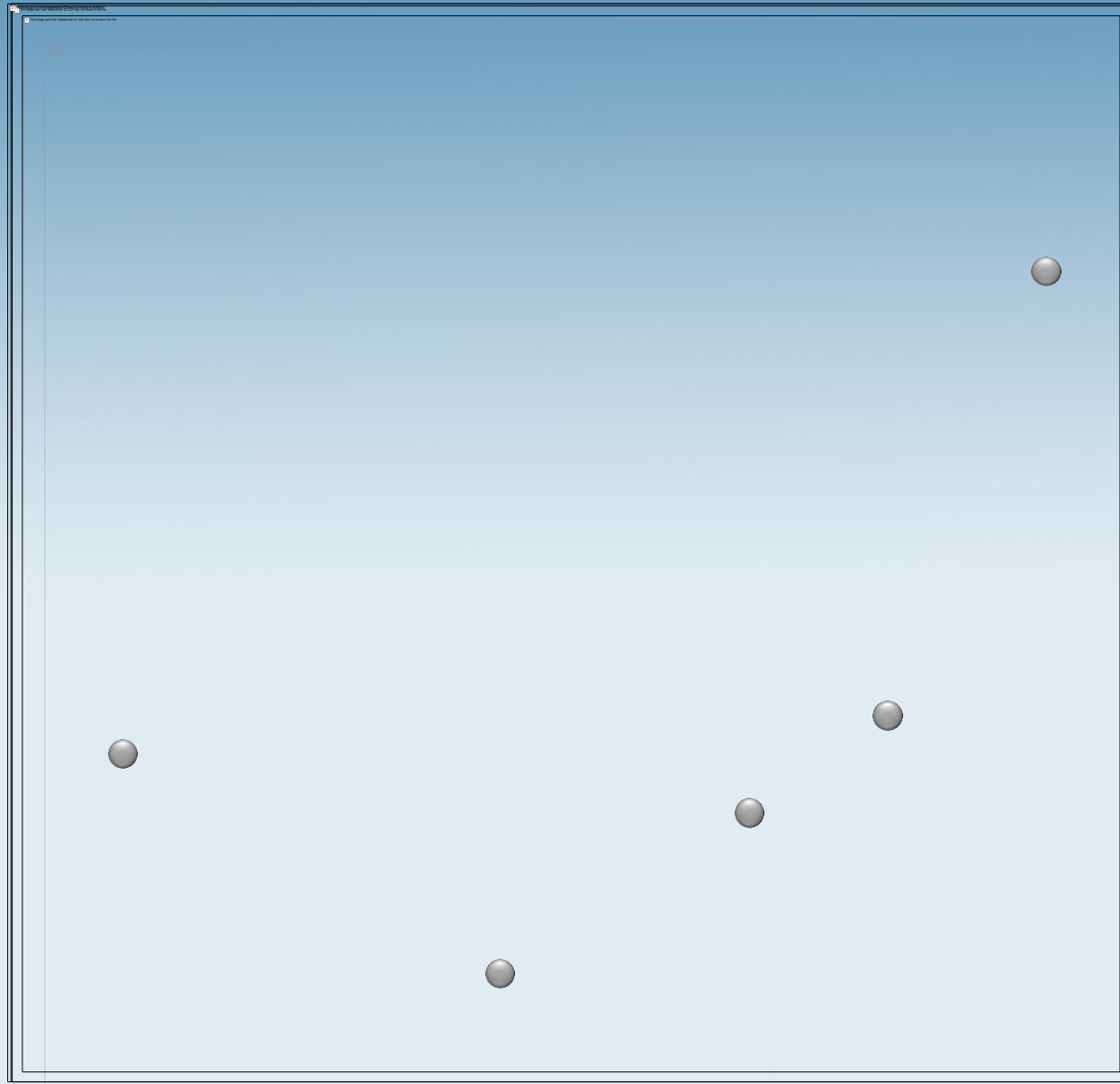
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The Murray-Darling Basin

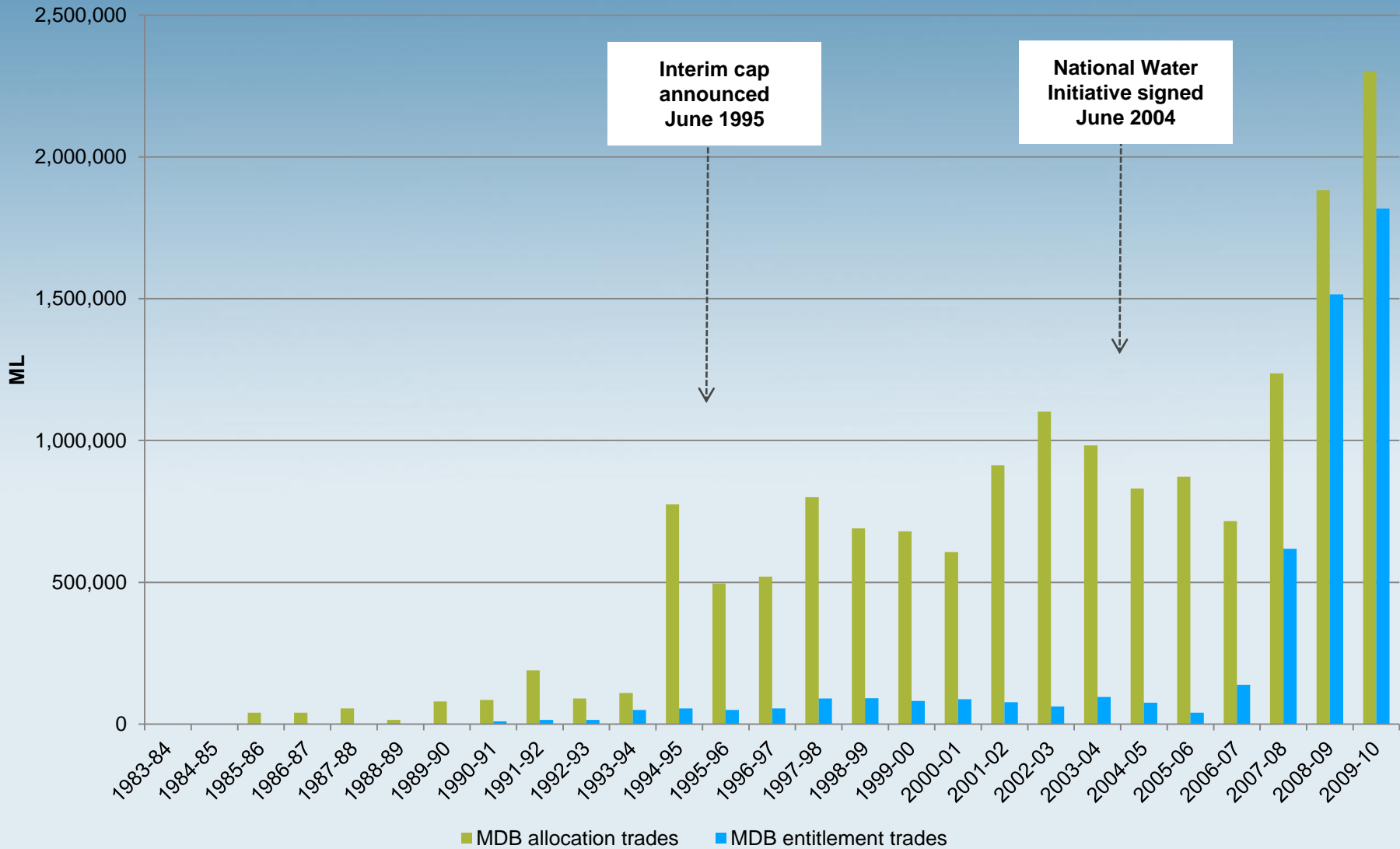


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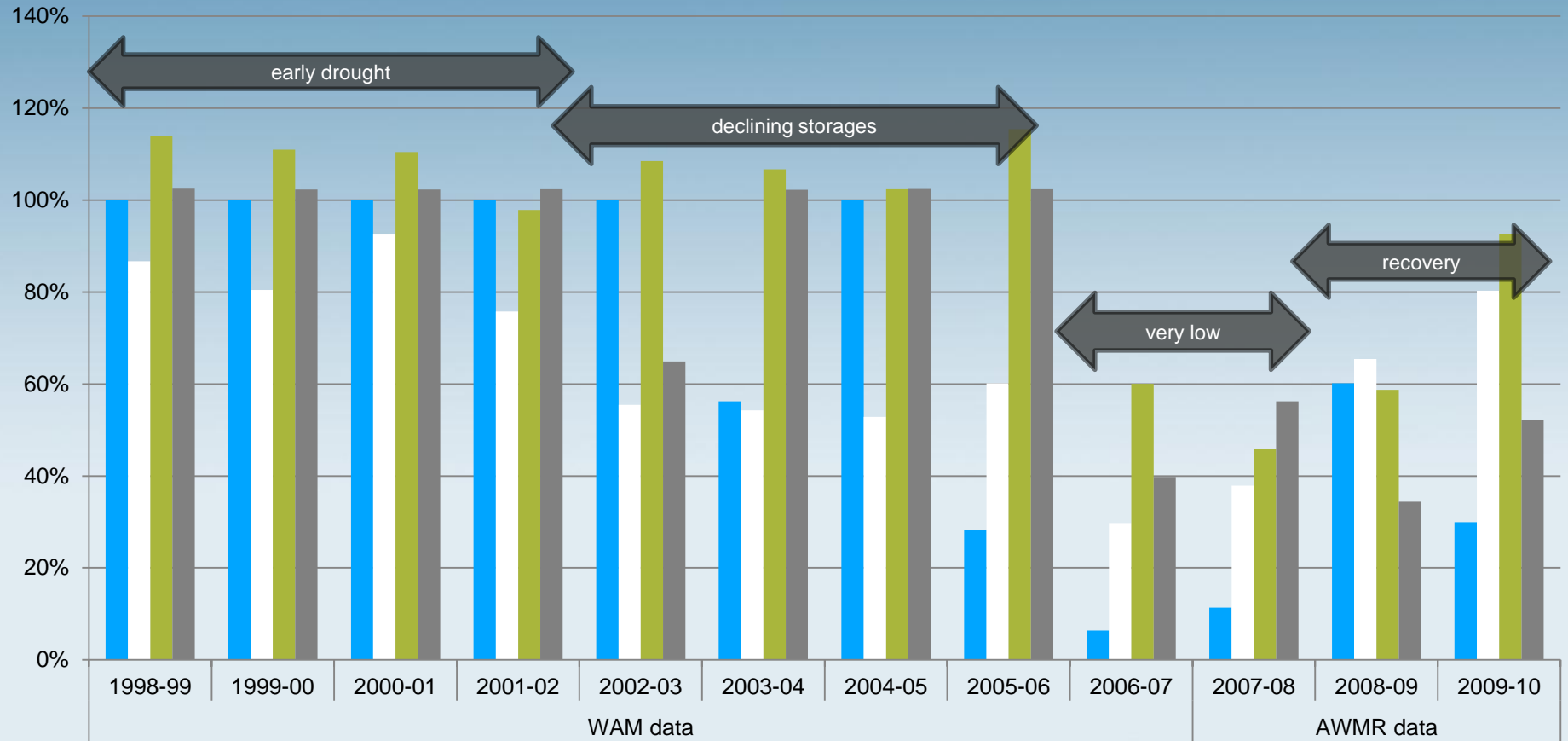


Water trading in the MDB





MDB allocations 1998-99 – 2009-10



■ Lower Darling

■ Murrumbidgee

■ SA Murray

■ Vic Goulburn



Southern MDB allocation levels and proportion traded

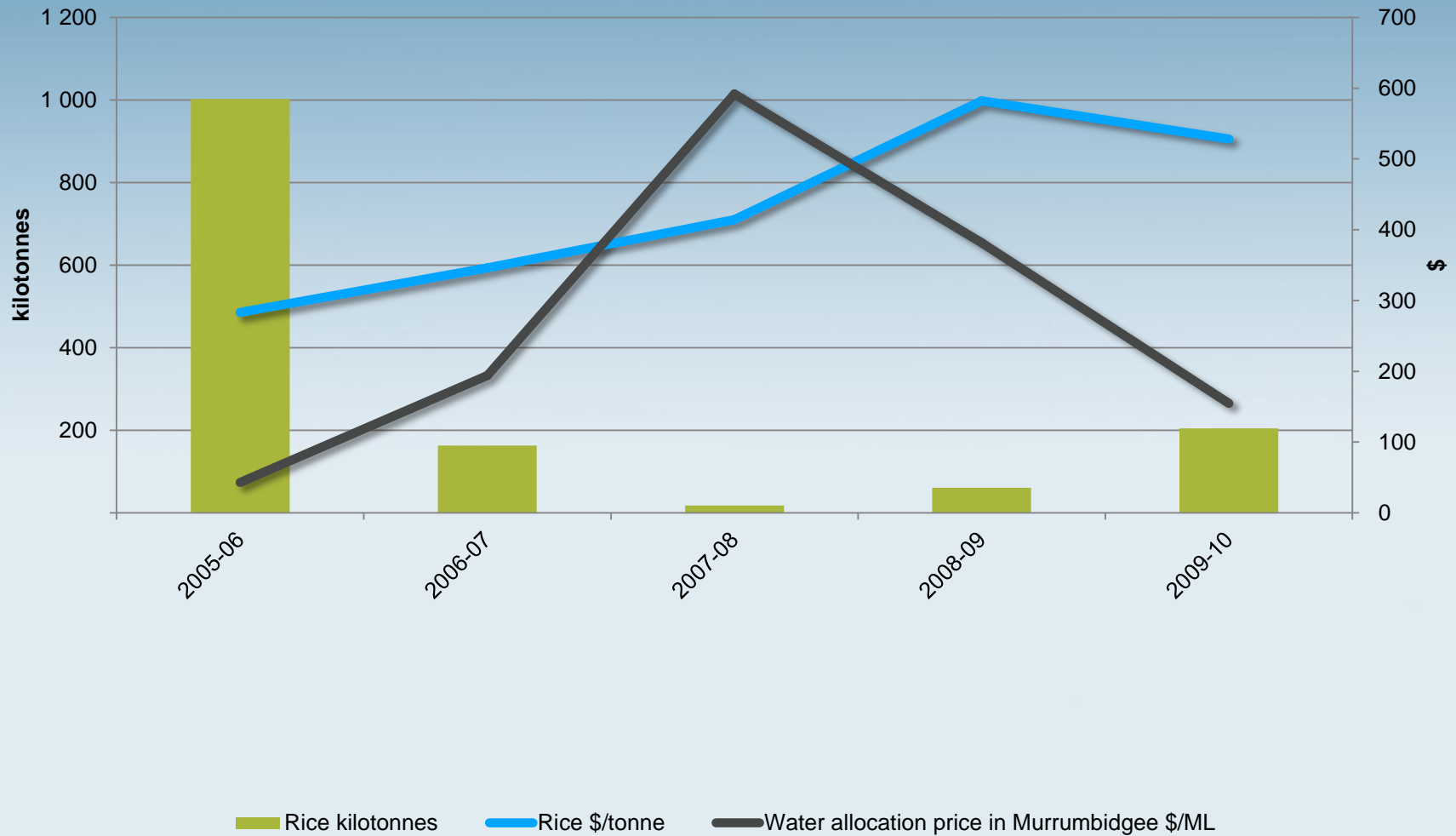


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Murrumbidgee rice production and price, and water allocation price





Net interstate allocation trade





Achievements of best practice pricing and institutional reforms

- Separation of policy, regulatory, service delivery functions
- Prices set independently to recover efficient costs and return on investment
- Increased transparency; cross-subsidies largely eliminated
- Elimination of allowances and property value based charges
- Application of two part tariff; uniform usage charge applying to all water used and based on long run marginal cost
- Efficiency improvements and greater utilisation of capital enabled real price reductions in 1990s
- Profitability has improved and businesses can expect a commercially viable return





Urban water capital expenditure



Total water and wastewater capital expenditure (\$000) 2003–04 to 2008–09



Achievements of environmental reforms



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- Increased awareness of environmental water
- Improved water plans to promote environmental water management
- A view expressed on how much is needed for sustainability (versus how much can be spared)
- Institutional arrangements in place for
 - Environmental water managers
 - Purchase of entitlements for environmental purposes





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