

Management of the Murray-Darling Basin: Scientific, Environmental, Social and Political Challenges

Michael Barber
Vice-chancellor & President
Flinders University



inspiring achievement

Outline

- Snapshot of the MDB
- Water flows and allocations
- Environmental health of the Basin
- Governance and regulatory regime
- Social and political challenges in developing a sustainable future for the MDB

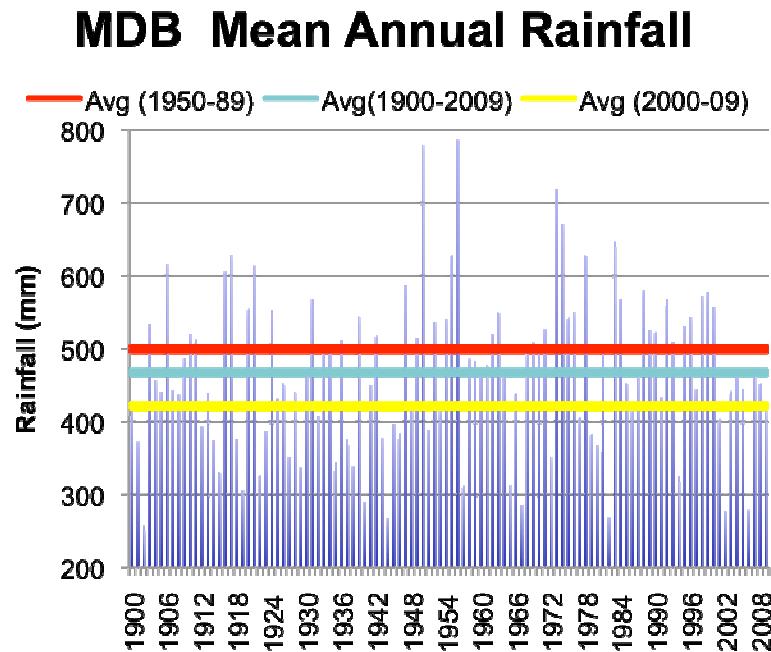
Snapshot of Murray-Darling Basin



Source: RiverMurray.com

- 1 million sq km
- 2.1 million people
- 18 major river basins
- Aust's 3 longest rivers
- 40% of Aust agriculture
- Over 30,000 wetlands
- One of the driest catchments in the world

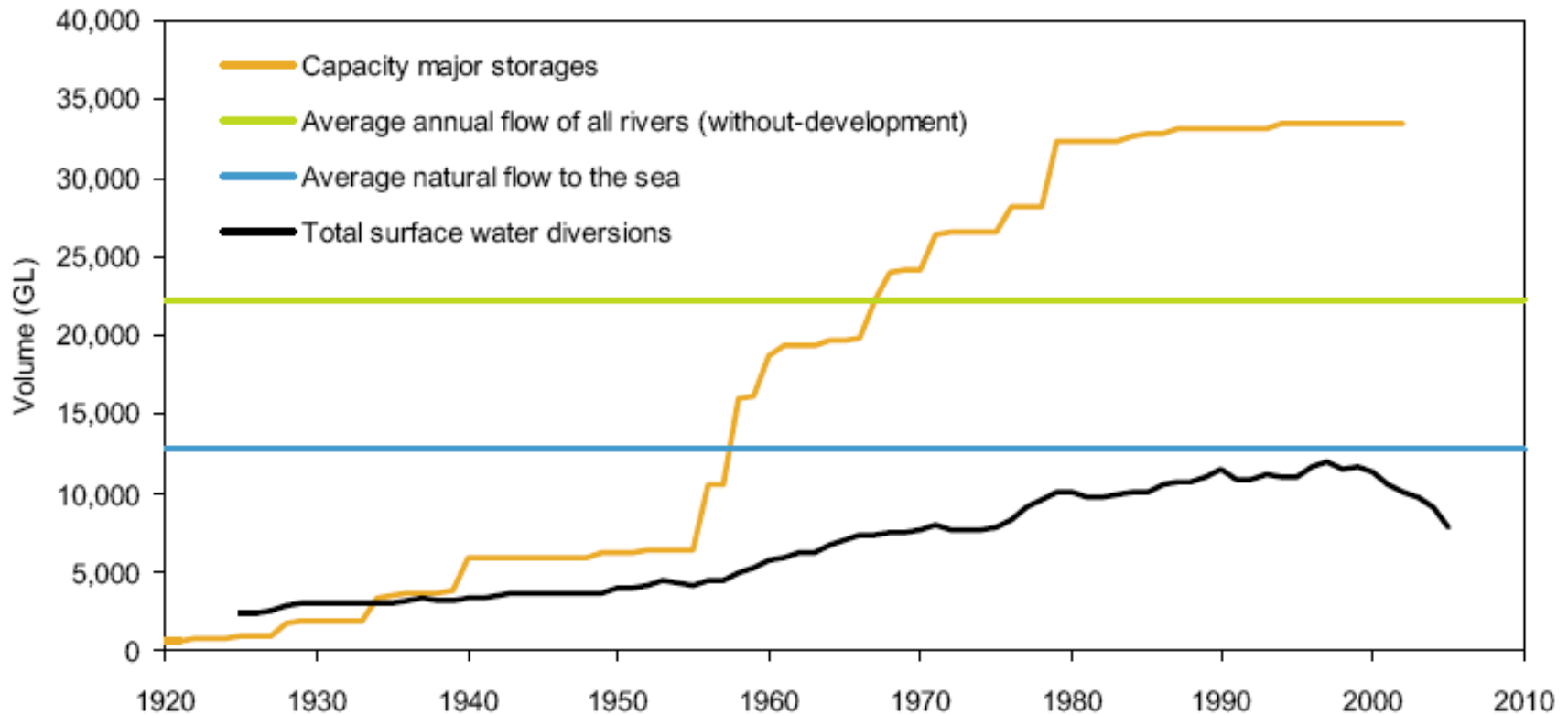
Water flows and diversions



Source: Australian Bureau of Metrology

- Highly variable
- Avg runoff 24,000GL
- Natural conditions 11,000GL in wetlands, floodplains, or evaporated
- Current diversions 11,500GL pa, 95% for irrigation
- 1,200GL from groundwater

Growth in storage and diversions



Source: MDBC, courtesy CSIRO

A basin in crisis

- *“there is a substantial risk [that] a working river will not be in a healthy state when the key system attributes of the flow are reduced below two-thirds of their natural level”* Murray-Darling Basin Commission (2002)

Health Rating	# of river valleys
Good	1
Moderate	2
Poor	7
Very poor	13

Sustainable Rivers Audit (2008)

Governance and Regulatory Regime

- National Water Initiative (2004)
 - blueprint for Australian water reform
 - implementation overseen by National Water Commission
- Water Act (2007)
 - powers to Aust Govt to coordinate water policy and programs
- Murray-Darling Basin Authority
 - “responsible for planning the integrated management of water resources of the MDB... putting water use on a sustainable footing”
 - currently preparing a “Basin Plan” to be released for consultation in mid-2010

Restoring environmental flows

- 4400GL required (40% reduction in extractions)
- *Water for the Future* will (hopefully) deliver 1200GL
 - Buybacks and water efficiency gains at a cost of \$8.9B
- Where could the remainder come?
 - Wentworth Group: focus acquisition on least profitable activities and support the communities affected
 - 65% reduction in the Murrumbidgee
 - 39% reduction in the Murray
- And that's where the politics start!

In conclusion

We have:

- The scientific knowledge
- Increasing understanding of the social impacts and the communities affected
- The resources needed
- The governance to implement the changes

But

Do we have the political will?

Thank you

In preparing this presentation I drew heavily on, and would like to acknowledge, the work of CSIRO, particularly the Murray-Darling Basin Sustainable Yields Project, and the recent report, *Sustainable Diversions in the Murray-Darling Basin*, of the Wentworth Group.



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