A new Basin Plan is being prepared for the Murray-Darling Basin. How will it take account of climate variability and droughts?

Tony McLeod
Murray Darling Basin
History of water resource management in the Murray-Darling Basin

1885 Deakin in the US/Mexico
1901 Federation
1915 River Murray Waters Agreement
1917 River Murray Commission
1988 MDB Commission
1992 MDB Agreement
1994 COAG water reform framework
2004 National Water Initiative
2007 Commonwealth Water Act 2007
2008 MDB Reform IGA/Water Amendment Bill 2008
(2011 Basin Plan)
Water Act 2007

- Murray-Darling Basin Authority established
  - Independent, expertise based
  - Basin Plan including enforceable, sustainable diversion limit
- Bureau of Meteorology - national water information role
- Commonwealth Environmental Water Holder
- Water trading and pricing
Murray-Darling Basin Authority

- prepare a strategic plan for the integrated and sustainable management of water resources for adoption by the Minister (Basin Plan)
- advise the Minister on accreditation of state water resource plans
- develop a water rights information service
- measure and monitor water resources
- gather information and undertake research
- engage the community
Water Amendment Bill 2008

- referral of certain powers to the Commonwealth
  - NSW, Qld and SA referred; Vic underway
- a new culture and practice of Basin-wide management and planning, through new governance structures and partnerships
- Murray-Darling Basin Authority and Murray-Darling Basin Commission brought together as a single institution
- Basin Plan to provide arrangements for critical human water needs
Murray-Darling Basin Institutional Structure and Governance

Commonwealth Water Minister

As provided for in the Water Act, the Commonwealth Minister is the decision maker on the Basin Plan.

Minister – Authority relationship as per Water Act 2007

Murray-Darling Basin Authority

Chair and Chief Executive and 4 part-time Authority members

The new Authority will have two roles:
- it will be responsible for developing, implementing and monitoring the Basin Plan, as provided for in the Water Act; and,
- will also be responsible for the current functions of the Murray-Darling Basin Commission

Ministerial Council

Cth (Chair), NSW, VIC, SA, QLD, ACT

Advisory
Can refer Basin Plan for reappraisal by Authority
Cth Minister on Basin Plan
Decision
Planning and management for the equitable, efficient and sustainable use of water, land and other environmental resources

Basin Officials Committee

Officials from 6 Basin Governments:
Cth (Chair), NSW, VIC, SA, QLD, ACT
Non-voting member: Authority Chair/Chief Executive

BCC provides advice to Ministerial Council;
BCC Chair an observer at Ministerial Council, by invitation of Ministerial Council

Basin Community Committee

Chair and 16 members, including 1 Authority member
Water Act 2007 (s.202)

Direct participation of an Authority Member as a BCC member (Water Act 2007 s 202)
who will also bring BCC advice back into Authority deliberations
Basin Plan

- supports international agreements
  - Ramsar
  - biodiversity
  - migratory birds
  - climate change

- best available scientific knowledge and socio-economic analysis

- strategies to manage, or address, risks including “the effects of climate change”
Basin Plan

Authority prepares, implements, monitors, enforces

- sustainable limits on surface and ground water diversions
- environmental watering plan
- water quality and salinity management plan
- water trading rules
‘...a single, consistent and integrated plan for the Basin’s water resources.’

Water quality and salinity management

Sustainable diversion limits

Environmental watering plan
Role of Basin States

- Ministerial Council
  - advises on Basin Plan / consultation
  - decision making on existing joint functions

- State water resource plans
  - existing plans continue to expiry (2014, 2019)
  - State plans must be consistent with the Basin Plan
  - new plans will be accredited for 10 years
  - provision for the Authority to prepare a water resource plan
Sustainable diversion limits

- *environmentally sustainable level of take*
  the amount which, if exceeded, would compromise key environmental values or the productive base of the water resource
  (after Water Act 2007)

- For each water resource area and the Basin as a whole

- Compliance from water entitlement purchases and Water Act 2007 provisions
Basin Plan

- concept document early 2009
- draft Basin Plan mid 2010
  - 16 week public comment
- commence 2011
How will the Basin Plan take account of climate variability and droughts?

- Move to sustainable diversion limits
  - Enduring ecosystem functionality

- Greater focus on drier end of the spectrum
  - Increase administrative certainty

- Proactive sharing of climate risk
  - The search for the perfect water share
Move to sustainable diversion limits

- Provides for inter-annual variability in water availability
  - 10 year accreditation / reviews of Basin Plan

- Long term average and specific annual limits in planning and compliance provisions
  - Individual water resource area, and Basin-wide

- Improvements on 1995 Cap:
  - Sustainable levels (not historic)
  - Basin-wide consideration
  - Binding
  - Covers surface water and groundwater
Greater focus on drier end of the spectrum

- Greater emphasis on ‘dry end’ generally
  - Less standing aside water resource plans
- Water for ‘critical human needs’
  - River Murray System
  - New provisions in Basin Plan and new MDB Agreement (state sharing)
- South Australia – storage right
  - ‘no disadvantage’ test
- Also:
  - Agreement much easier to change (regulation)
  - Information
  - water trade
Proactive sharing of climate risk

- *strategies to manage, or address, the effects of climate change* *(after Water Act 2007)*

- Existing water sharing arrangements distributes climate risk between uses
  - Varies between catchments (~50:50 to ~80:20)
  - Generally burden is greater on non-consumptive water

- The *‘perfect water share’*
  - Shares risk proactively
  - Not linear (needs, objectives, expectations may change with climate)
  - Values based decision
"Not to choose is to choose"
Talleyrand, 1754 - 1838