



Australian Government

**Department of Sustainability, Environment,
Water, Population and Communities**



Commonwealth Environmental Water - planning and management

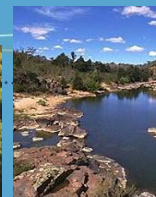
Steve Costello, Assistant Secretary

Farm Irrigation (DSEWPaC) Murray-Goulburn (J. Baker) Murrumbidgee River Corridor (J. Houldsworth)
River Murray at Bunyip Reach (J. Baker) Rainwater tank (M. McAulay) Agriculture in the Murray-Darling Basin (J. Baker)



Presentation Topics

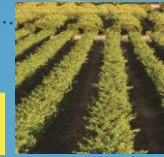
- Who we are and what we do
- The water holdings
- Environmental water delivery to date
- Planning and decision frameworks
- Key priorities for 2011-12
 - Efficient and effective planning and use of CEW
 - Engage with the development of the Basin Plan
 - Develop the approach to portfolio management (including trade and carryover)
 - Implement Monitoring, Evaluation and Reporting
 - Establish more separate management arrangements for CEW
 - Enhanced communications and stakeholder engagement



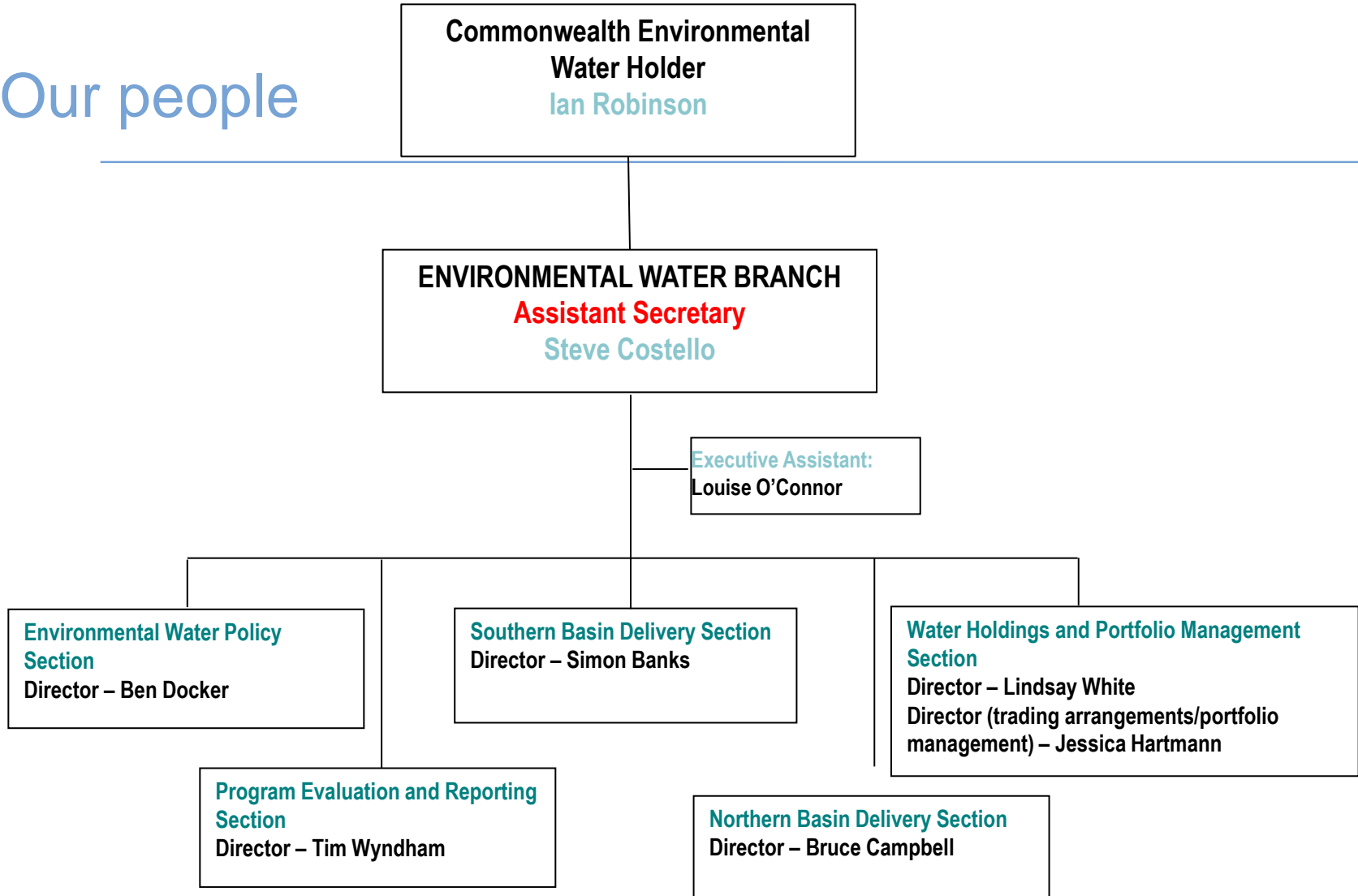
Commonwealth Environmental Water

- Established by *Water Act 2007*
- The Commonwealth Environmental Water Holder is responsible for the management of Commonwealth environmental water holdings:
 - to protect or restore environmental assets of the Basin; and
 - must act in accordance with the Environmental Watering Plan (part of the Basin Plan) when in place.
- Stewardship of >\$1.5 billion of assets, going to \$5 billion:
To manage efficiently and effectively the Commonwealth's assets to maximise environmental benefit





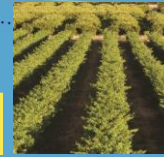
Our people



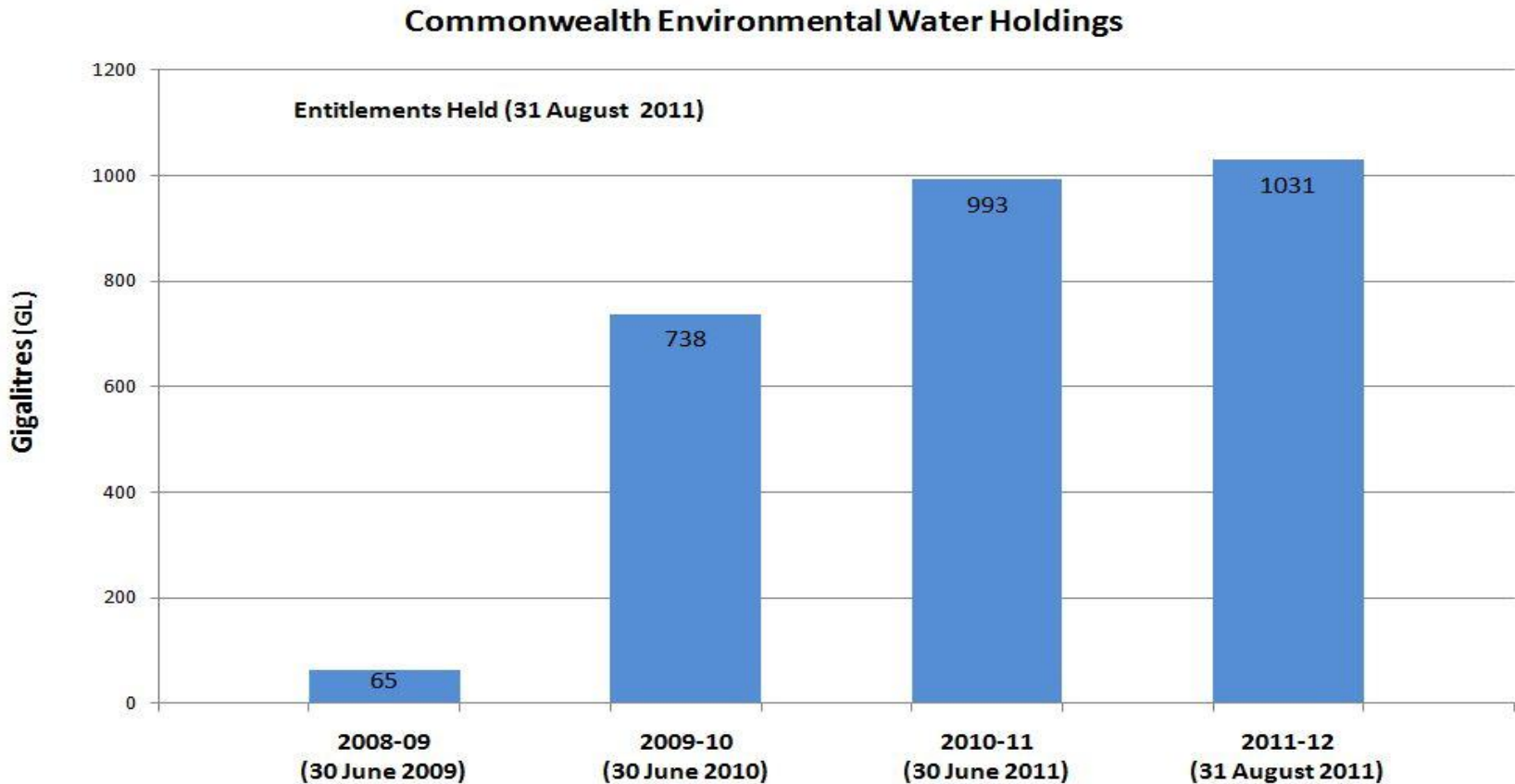


Context in which we operate

- The conditions have changed
 - From drought triage with small volumes – protect
 - To using larger volumes – restore
- Growth in the holdings
 - Allocations increasing (with the recovery from drought)
 - Entitlement acquisition ('bridging the gap' commitment)
- The function is evolving
 - New approaches: multi-site connected use, shepherding
 - Coordinating use with other environmental water managers
 - Engagement with various local arrangements
 - Implement adaptive management
- Implementing the Basin Plan and environmental watering plan, when finalised



Commonwealth environmental water holdings





Portfolio of Commonwealth environmental water

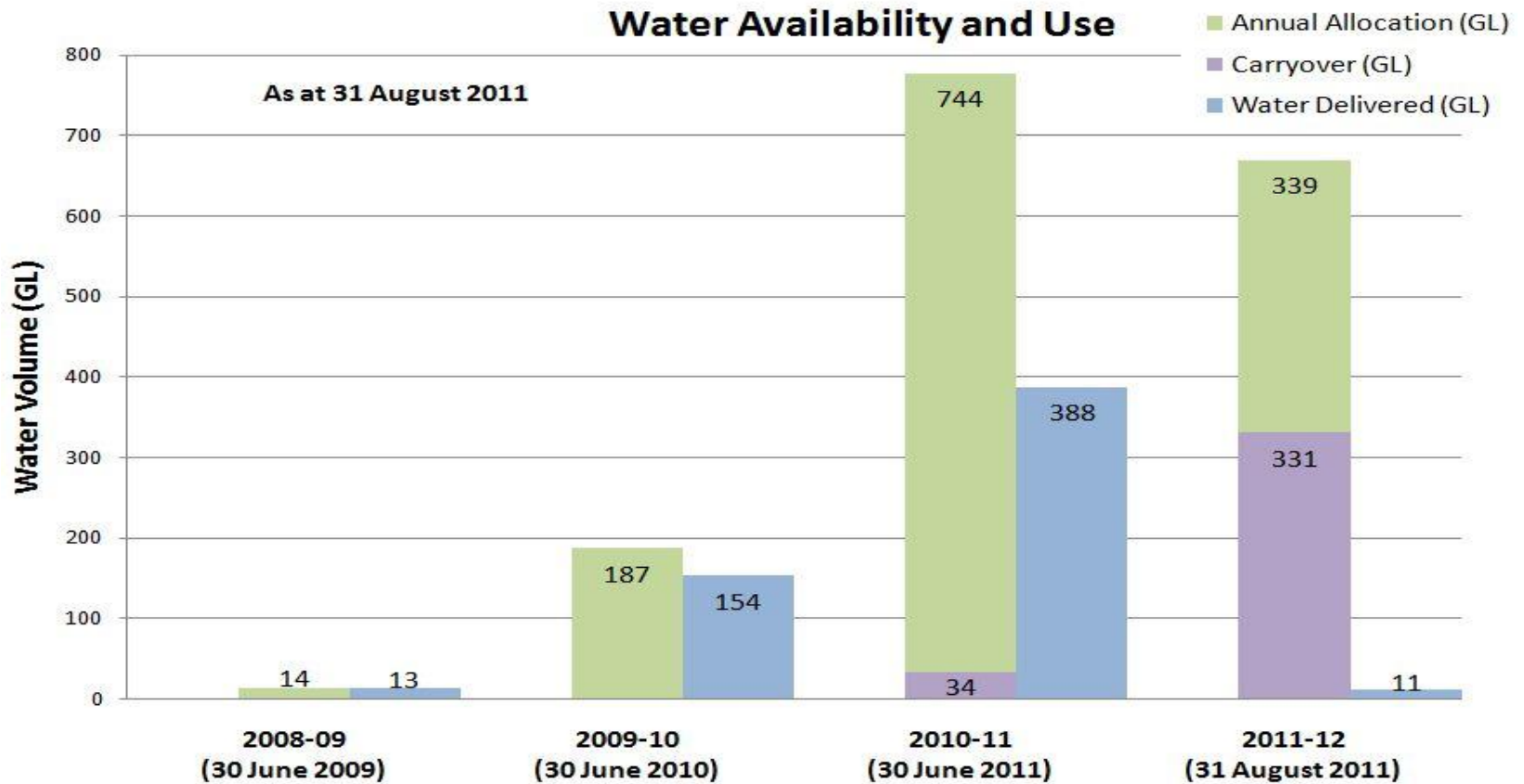
- 1031 GL of entitlement held at end August 2011
 - Southern connected basin: 66 per cent
 - Northern basin: 34 per cent

 - High reliability: 32 per cent
 - General / low security: 60 per cent
 - Supplementary: 4 per cent
 - Unregulated: 4 per cent

- Entitlements in 21 water sources / catchments – 39 different types, each with different rules.



Commonwealth environmental water





Map location of environmental assets watered

2009-10

NEBINE CREEK
4.46 GL OF RIVER FLOWS

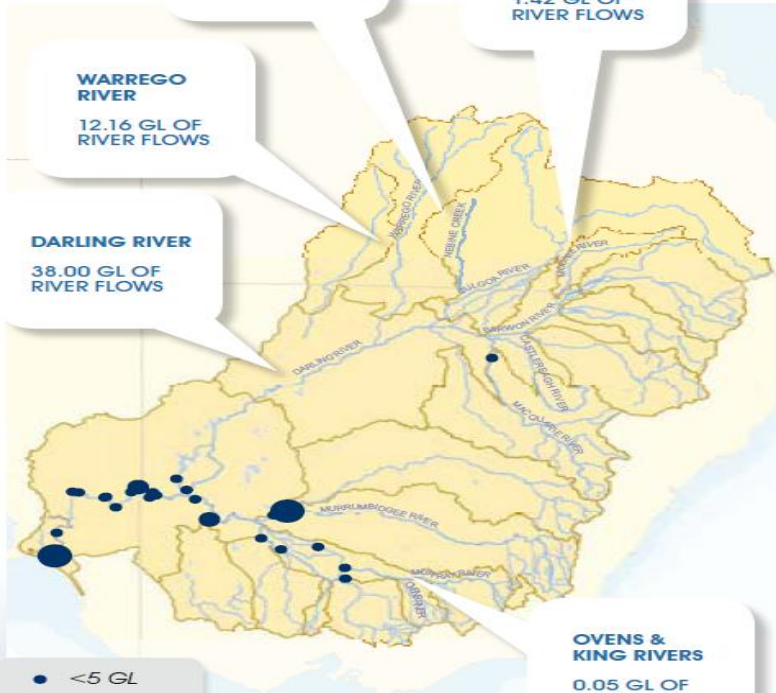
MOONIE RIVER
1.42 GL OF RIVER FLOWS

WARREGO RIVER
12.16 GL OF RIVER FLOWS

DARLING RIVER
38.00 GL OF RIVER FLOWS

OVENS & KING RIVERS
0.05 GL OF RIVER FLOWS

- <5 GL
- 5 - 15 GL
- >15 GL



2010-11

Upper Warrego River
In River Watering

Moonie River
In River Watering
1415.0ML

Darling River
In River Watering

Darling Anabranch
In River Watering

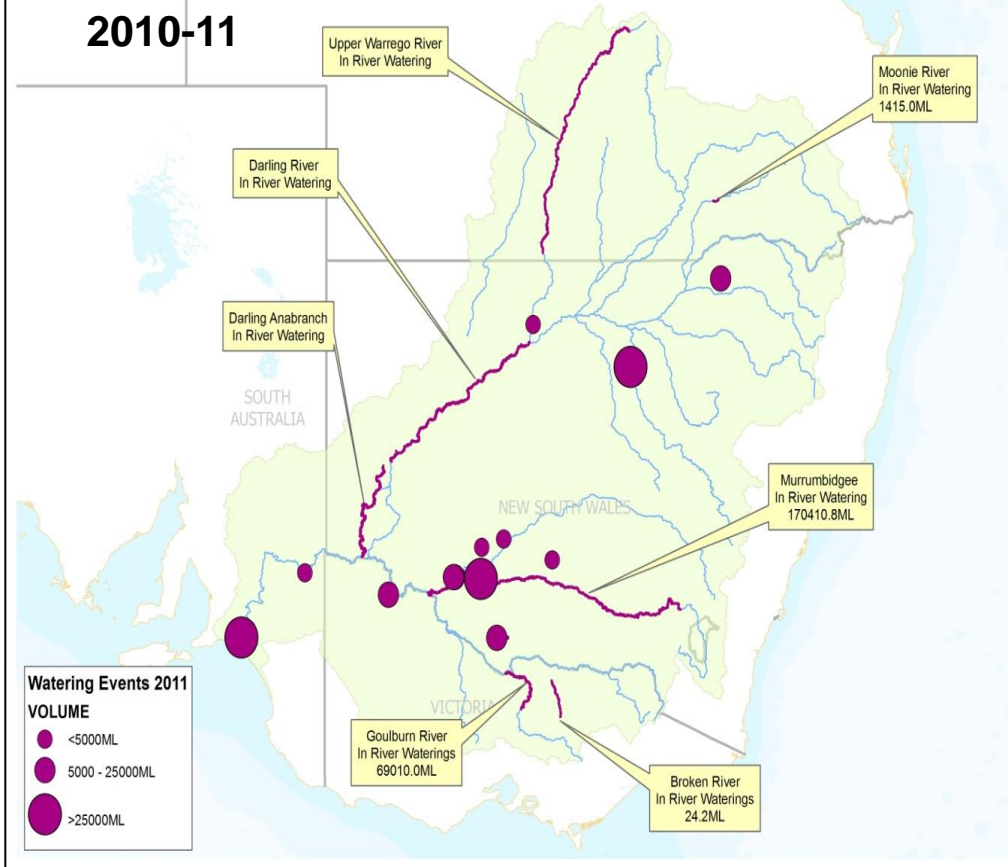
Murrumbidgee
In River Watering
170410.8ML

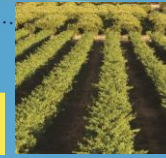
Goulburn River
In River Waterings
69010.0ML

Broken River
In River Waterings
24.2ML

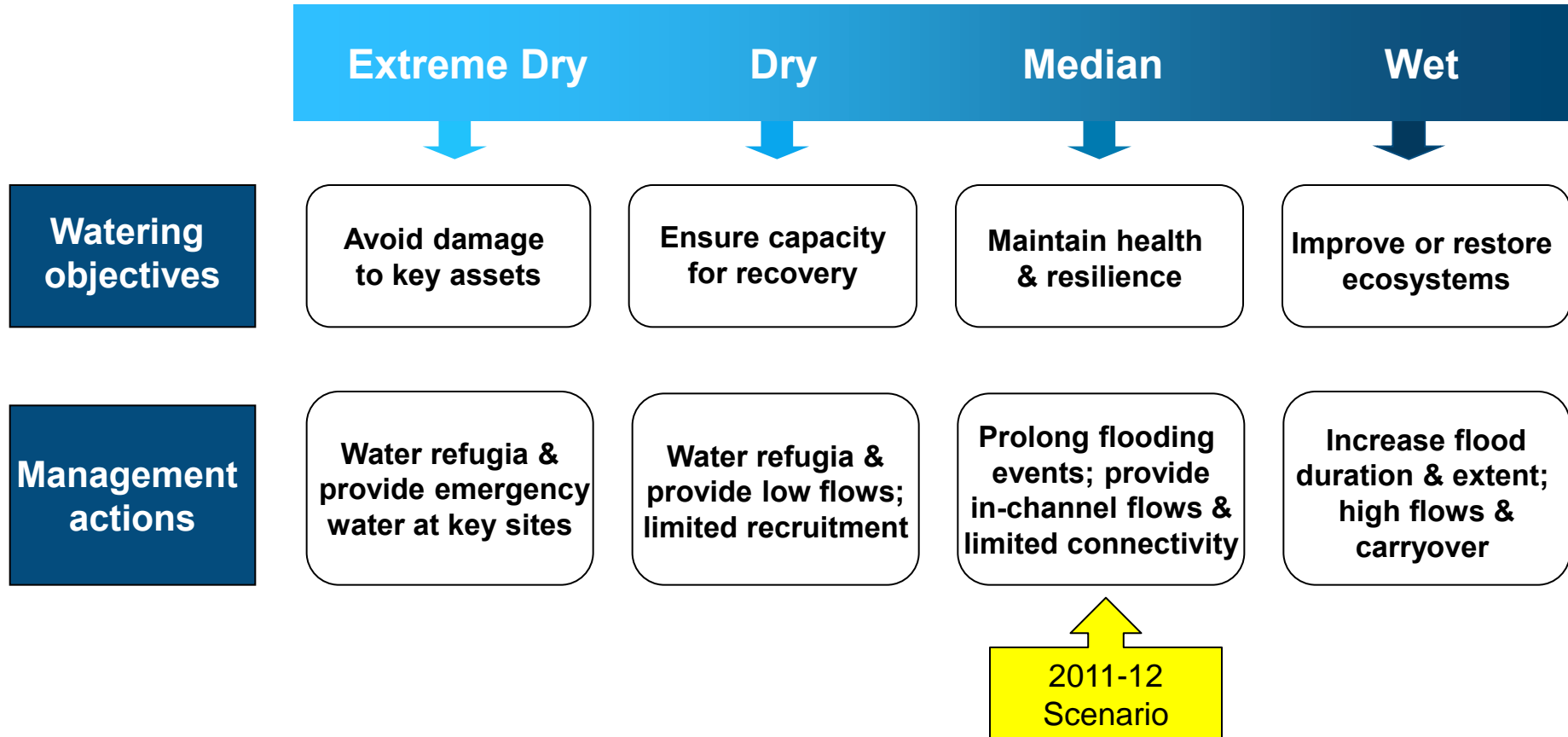
Watering Events 2011
VOLUME

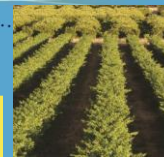
- <5000ML
- 5000 - 25000ML
- >25000ML





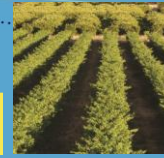
Adapting to water availability



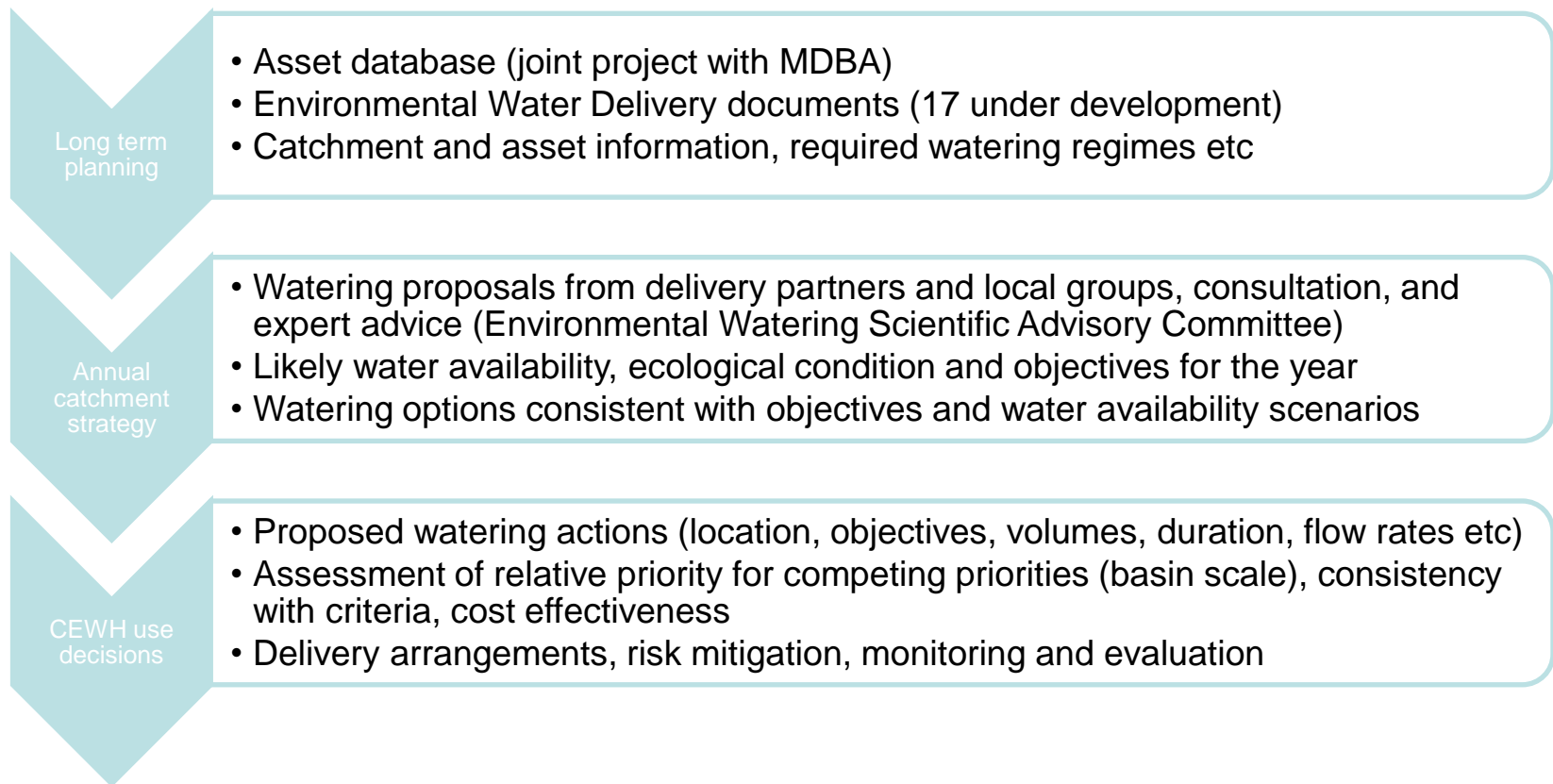


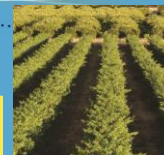
Challenges in delivery of environmental water

- Scaling up to large water use actions
- Constraints on overbank events due to flood risk of private property (easements required).
- River operations and accounting rules are designed for irrigation delivery to a single point
- To achieve 'green to the sea' (multi-site) use new 'rules' are required to:
 - call allocation from a specified storage
 - to call allocations in addition to unregulated flows
 - deliver to multiple sites, and 'shepherd' environmental water so it is not diverted or regulated
 - To credit return flows



Planning for use of CEW (current)

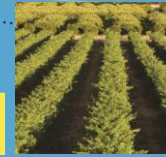




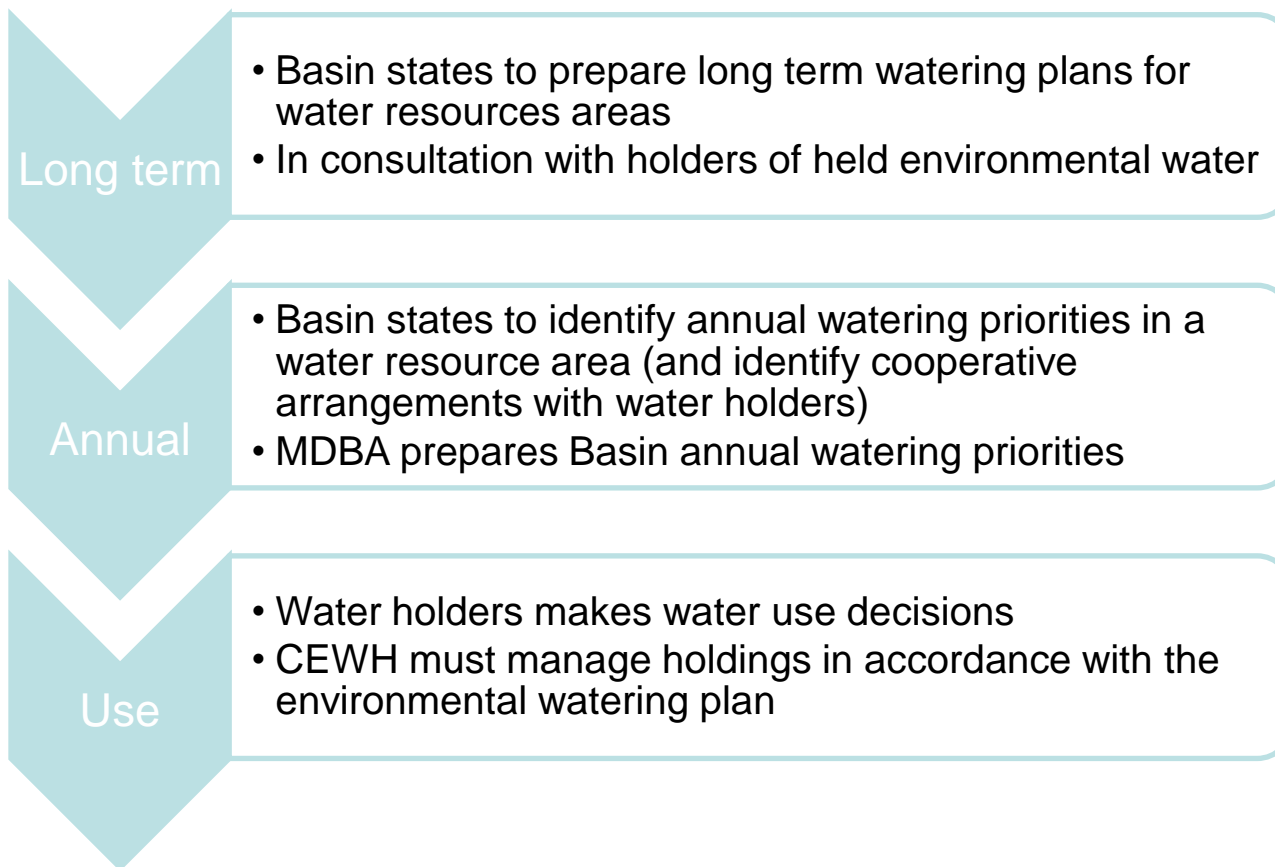
Assessment Framework for CEWH decision

■ Assess water use proposals against five criteria:

1. Ecological significance of the asset;
2. Expected ecological outcome;
3. Potential risks (including water quality and flooding);
4. Long term sustainability of the asset (including management arrangements);
5. Cost effectiveness and operational feasibility.



Planning framework under the Environmental Watering Plan (in future)





Portfolio management

- Objective is to achieve maximum environmental outcome from the portfolio for the Basin.

- Portfolio management options include:
 - use of water within the current year
 - carryover water to subsequent years
 - trade of the holdings (disposal / acquisition)

- Options are continually reassessed relative to the benefits of other options (across the Basin and across future years).

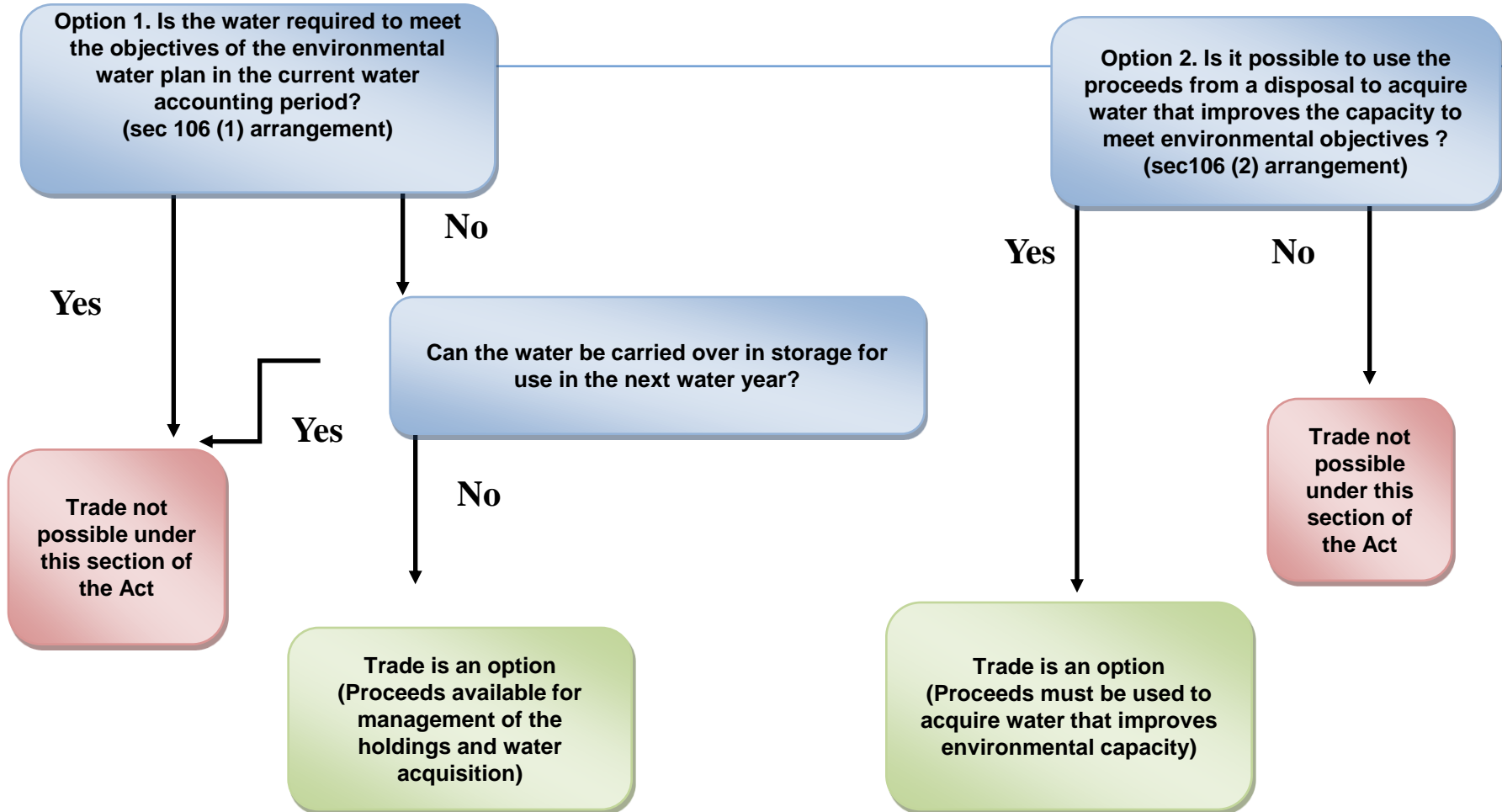


Portfolio management - examples

- Carryover water to subsequent years when environmental outcome is expected to be higher (e.g. 320 GL carried over into 2011-12)
- Prioritising water use from entitlements where there is less capacity for carryover
- Transfer of water allocations between connected catchments
- Transfer of water allocations to other entitlements (where the rules provide for this)
- Trading of water in the market (in the future).

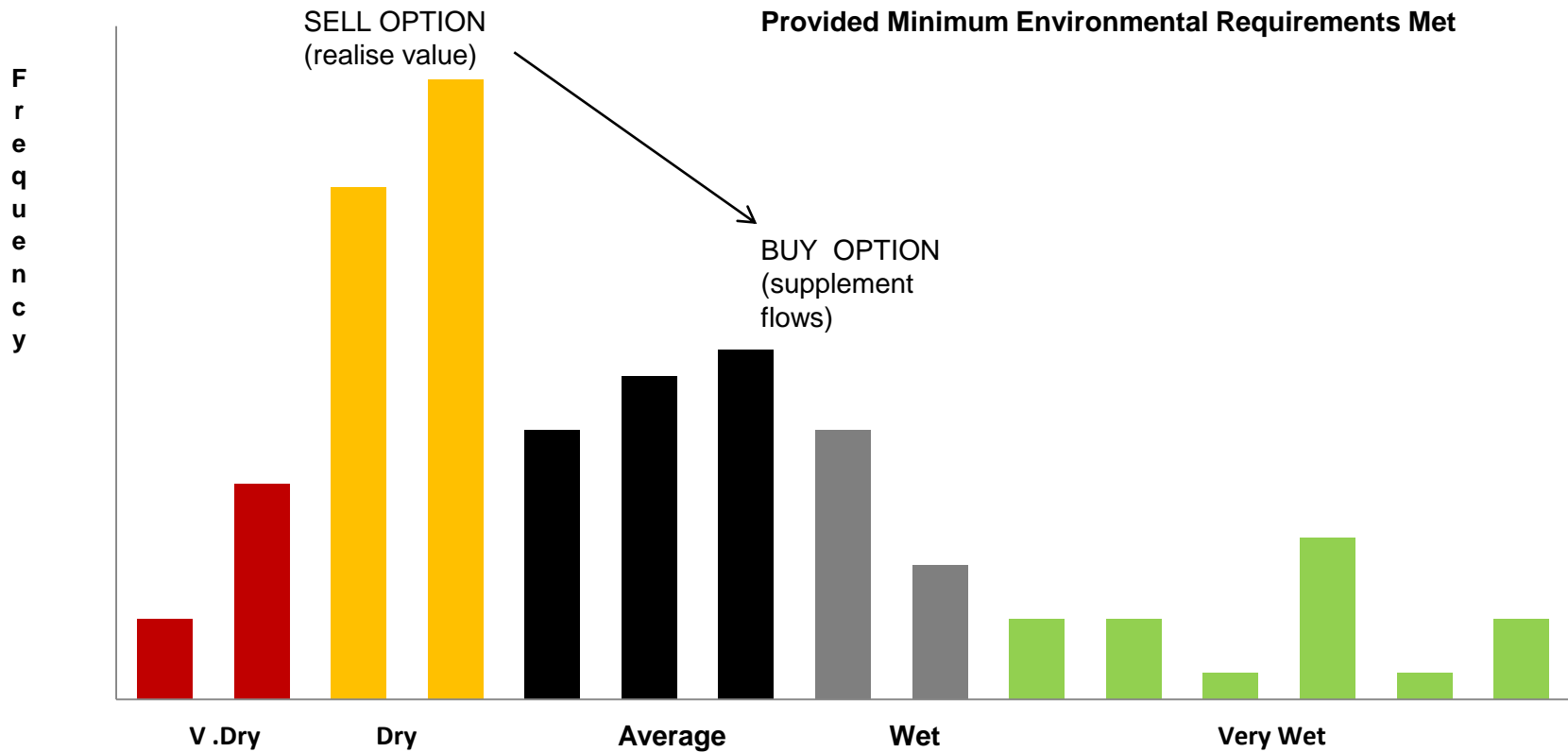


Water Act Arrangements - Alternative Options for Trade of Commonwealth Environmental Water Holdings





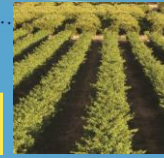
Murray River Inflows - 120 Years





Trade of Commonwealth environmental water

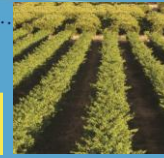
- Trade of held environmental water is desirable to meet Basin wide annual priorities:
 - where environmental requirements have been met and carryover is not available;
 - to reflect different conditions across the Basin (higher priorities in some catchments relative to others)
 - where there are delivery constraints (works, easements not in place) that limit use
 - To establish capacity to provide for future years (funds held in special account).



Trade - proposed way forward

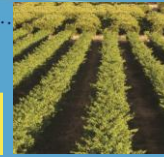
- Proposed framework for the trade of Commonwealth environmental water
 - consultation paper in coming weeks

- Operating rules (s109)
 - transparency (objectives, actions, trade prices)



Monitoring evaluation and reporting (MER)

- Support good governance and accountability
- Support adaptive management
- Help build the knowledge base about the management of environmental water

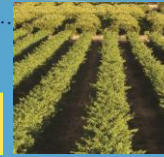


Three level approach to MER

- Operational level MER:
 - ensure that an action is undertaken in accordance with watering objectives

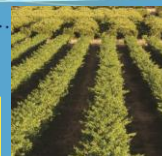
- Intervention level MER:
 - ecological response to watering actions
 - short to medium term
 - site and catchment scale

- Program level MER:
 - ecological response to many watering actions
 - medium to long term
 - catchment and Basin scale



Proposed MER framework

- Our MER role – outcomes from the use of Commonwealth environmental water
- Identify how we best complement and build on other MER activities at the Basin, regional and local level and contribute to Basin Plan MER
- Establish a long term approach to investing in MER



2011-12 CEW MER activities

Operational monitoring for all watering actions, which will continue to be funded and undertaken by delivery partners

Ecological response monitoring by delivery partners, where there is alignment with Commonwealth needs

Ecological response monitoring funded by the Commonwealth, monitoring of ecological outcomes of CEW in 3 to 4 different areas

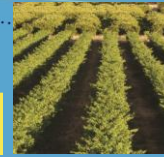
Photo point monitoring, webcams and inundation mapping (satellite imagery and aerial photography) funded by the Commonwealth, to support reporting and public awareness of watering actions and outcomes across the Basin in an economical way.



Institutional arrangements

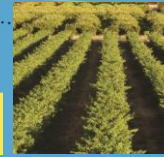
- Windsor Inquiry made recommendations about institutional arrangements
 - A more separate and distinct entity may assist in improving the transparency and accountability of environmental water management.
 - Government will be responding to these recommendations soon.

- Have focused on working through delivery partnerships and existing institutional arrangements for managing environmental water
 - Will continue to do so but with a clearer and more distinct identity



Local engagement

- Community views on the priorities for use of Commonwealth environmental water
- Help from others to achieve best possible outcomes:
 - identify ecological needs down to the local level
 - information about conditions
 - create opportunities for use
 - arrangements for delivery and monitoring
- Accountability



Proposed way forward

- Be clearer that we have an open door policy – all proposals are welcome
- Actively seek community input on the use of Commonwealth environmental water
- Greater focus on engagement on a catchment by catchment basis
- Seek to make information more accessible
- Improved website at www.environment.gov.au/ewater
 - New features – photopoints, webcams, vodcasts
 - Subscribe for email updates, all news or catchment specific