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Department of the Environment
and Water Resources

How will water be managed to achieve environmental outcomes?



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How will water be managed to achieve environmental outcomes?

- Provisions in NPWS and Water Act 2007 to deliver e-water - quantity and quality:
 - Environmental Watering Plan
 - Commonwealth Environmental Water Holder
 - Water Quality Plan





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Environmental Watering Plan - Overview

- Basin-wide and part of larger Basin Plan
- Objectives - protect and restore Basin environmental assets
- New Murray Darling Basin Authority (MDBA) will develop, manage and implement the Environmental Watering Plan (EWP)





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Environmental Watering Plan (Cont)

- EWP a strategic framework for coordinated e-watering across Basin with 5 yearly reviews
- EWP supported by a number of watering schedules
- Water resource plans - plan e-watering at the catchment level - prioritising assets, identifying watering requirements





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Environmental Watering Plan (Cont)

- The EWP will give effect to international environmental agreements.
- It has a number of mandatory components:
 - Overall environmental objectives
 - Methods used to identify & prioritise key assets requiring e-watering
 - E-management framework
 - Targets
 - Principles for applying e-water





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EWP - Targets

- The Act requires the EWP establish targets to measure progress in achieving its objectives
- Targets may relate to the Basin as a whole, to catchments, or specific assets and may include:
 - Water resource health (e.g. macro-invertebrates, fish spawning)
 - Water flows (e.g. seasonality, velocity)
 - Water pressure (for groundwater systems)
 - Water levels (e.g. to trigger wetland inundation at the right time)





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Environmental Watering Schedules

- Commonwealth e-water application and use must be consistent with the EWP
- Commonwealth e-water will be applied using periodic watering schedules
- The MDBA must develop periodic e-watering schedules





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Environmental Watering Schedules

- Probably set at Water Resource Plan area or groups of Water Resource Plan areas (e.g. southern basin connected system; connected systems in northern Basin).
- Identify e-water delivery requirements (volume; timing; duration; triggers; etc) for priority assets.





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Environmental Watering Schedules - Development

- The MDBA is required, in developing periodic watering schedules, to
 - take account of other water recovery programmes & e-watering in the MDB
 - consult e-water holders; owners of environmental assets; and managers of planned e-water in developing schedules





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Environmental Watering Priorities

- For the Commonwealth, generally matters of national environmental significance (NES) under the *EPBC Act*
 - Ramsar wetlands, threatened species, critical habitats, migratory species
- Also informed by the ability to apply water; management plans; significance of outcomes; cost-effectiveness
- State / regional priorities





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Commonwealth E-Water Holder

- Established under Water Act 2007 to:
 - Hold Commonwealth entitlements
 - Actively manage portfolio
 - Make Commonwealth e-water available for environmental purposes





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Commonwealth E-Water Holder

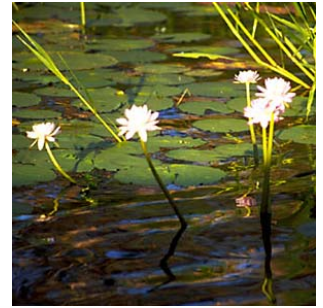
- Statutory position within the Department of the Environment and Water Resources
- Principal activities in the Murray-Darling Basin (but will operate Australia wide)
- Trading and operating rules to be set by the Minister
- Can trade/dispose of water entitlements within limitations





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Commonwealth E-Water Holdings

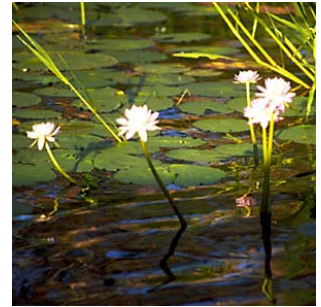
- E-water holdings sourced from:
 - TLM water recovery measures
 - The NPWS programmes
 - Direct purchases & trades
 - Donations





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Commonwealth E-Water Holder - Reporting

- Public reporting required annually on:
 - Achievement against objectives of EWP
 - Management of special account
 - Directions given by Secretary &/or Minister concerning water use





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Water quality and environmental outcomes

- The Water Act 2007 requires the development of a Water Quality (WQ) and Salinity Management Plan as an element of the Basin Plan
- The WQ&SM Plan will need to give effect to the:
 - National Water Quality Management Strategy and
 - Basin Salinity Management Strategy





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Water Quality & Salinity Management Plan

- The Plan must identify the key causes of water quality degradation in the MDB
- Include water quality and salinity objectives and targets for Basin water resources
- The Water Quality and Salinity targets must be reviewed every 5 years





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Water Quality Targets

NWQMS process

Environmental Values

- Community decision about the values of the water resource

Water Quality Objectives

- Based on ecosystem type, the agreed Environmental Values and any site specific information





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Water Quality Targets (Cont)

Water Quality targets:

- numerical levels or descriptive statements
- met within a specified timeframe to protect and maintain environmental values
- Basin-wide, end-of-valley or site specific





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Salinity Targets

Salinity targets:

- Already set in the MDBC Basin Salinity Management Strategy
- Basin-wide and end-of-valley targets
- Over time seek to integrate salinity and water quality targets





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Where To From here?

- MDBA to determine development process for the Basin Plan, including the Environmental water Plan and the Water Quality & Salinity Management Plan
- Will include a public consultation process





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THANK YOU

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