

Towards an ideal framework for water trading in the Murray Darling Basin

Water Trading - Future Directions

Water Trading Forum

Presented by Monash Centre for Regulatory Studies and the Australian Competition and Consumer Commission

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Agenda

- Trading rule context
 - ▶ New role for ACCC, MDBA
- An ideal trading framework – first principles
 - ▶ Functions, features, statutory framework
 - ▶ Areas for potential improvements

Introduction, context

- Commonwealth Water Act 2007 includes new roles and obligations related to water trading
 - ▶ Murray-Darling Basin Authority (MDBA) must develop “trading rules” as part of Basin Plan
 - ▶ ACCC advisory role on trading rules
 - ◆ MDBA to obtain, have regard to ACCC advice
- Aim of ACCC trading rule advice
 - ▶ Facilitate and support an efficient water market, consistent with Water Act objectives, principles
 - ▶ Draw on knowledge about current arrangements
 - ▶ Consider desirable future arrangements - from a first principles approach

This presentation

- Considers components of an “ideal” trading market framework
- Views ideal from 3 lenses
 - ▶ **Functions** required (including who should perform these)
 - ▶ **Features** that would characterise such a market
 - ▶ Desirable **statutory framework**
- Does not consider detailed content of trading rules

Scope of water trading – what does it encompass ?

- **Tradable water rights** defined as
 - ▶ water access rights
 - ▶ water delivery rights
 - ▶ irrigation rights
 - ◆ Section 4 of the Act

- **Water trading** encompasses
 - ▶ trading and transfer of tradable water rights (permanent and temporary) between different entities (for example, irrigators, environmental water managers, and water authorities)
 - ▶ other related rights and obligations (including delivery entitlements, salinity trading)
 - ▶ consequential management of physical water systems, registration systems, transfer processes, analysis and information, and accounting arrangements

Definition of an “ideal” trading market

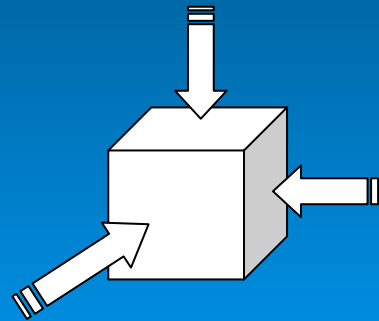
- Best supports achieving basin water market, trading objectives

- Facilitate the operation of *efficient* water markets and opportunities for trading
 - ▶ within and between states – where resources physically shared / hydrological connections exist
- *Minimise transactions costs* on water trades
- Enable *appropriate mix of water products* to develop
- Recognise and protect the needs of the *environment*
- Provide appropriate protection of *third party interests*

Objectives, Schedule 3, CI 3, Water Act 2007

Ways of looking at an ideal framework

Statutory framework – *What are the desirable characteristics the framework?*



Features – *What are the features (economic outcomes) of an ideal trading market?*

Functions – *What functions would be required, performed by whom, on what basis in an ideal framework?*

Categorisation of functions

- Tradable rights - property rights establishment, issue, allocations, etc
- Registration system - establishing and maintaining water registers
- Trading and transfer process (legal) - rules, approvals, legal transfers
- Analysis and information - available water, constraints, market prices, adjustments for transfers between basins
- Accounting (water) - resource (basin wide, state wide, resource areas), environmental accounts, individual water right 'bank accounts'
- System management (physical) water resource management, system operation, infrastructure planning, provision, metering and data

Functions – Observations

- Most of the functions necessary for an efficient market appear to have been identified, and are currently performed
- Some naturally best performed on a basin wide basis
 - ▶ Where similar functions are performed by separate entities, governments and agencies, could consider consolidation
 - ▶ Opportunity to reflect economies of scope and scale related to expertise, systems, knowledge

Features of ideal water trading arrangements

- Clear policy objectives which
 - ▶ bind all decision makers
 - ▶ can guide market evolution
- Clearly defined legal rights (property rights)
 - ▶ tradable rights with appropriate attributes
 - ▶ transparent allocation mechanisms
- An effective statutory framework
 - ▶ best practice regulation, effective instruments, 'fit for purpose' monitoring and enforcement
- Provision of infrastructure to support physical water storage, delivery
 - ▶ Storages, rivers, transportation systems, metering

Features of ideal water trading arrangements (cont)

- Clear accountability for, expertise in, and efficient delivery of physical water management, including
 - ▶ system operation
 - ▶ system optimisation (short term)
 - ▶ metering and settlement of water used
 - ▶ resource management (day to day, annual, long term)

Observations on features

- Significant volumes of trading and transfer of Basin water resources occur now (particularly intra state)
- Inefficiencies and uncertainties will be further tested and exposed with increasing trade
- The next series of slides offer observations on potential areas for improvement
 - ▶ Opportunities to standardise definitions and processes
 - ▶ Trading and transfer processes
 - ▶ Resourcing
 - ▶ Provision of information
 - ▶ Environmental water
 - ▶ Registry arrangements

Opportunity - standardise definitions, processes

- NWI objective is for clear and nationally compatible characteristics for water access entitlements
- Anecdotal evidence suggests
 - ▶ too many different types of water rights
 - ▶ jurisdictional difference in practice in the level of security of rights
- Potential for rationalisation and standardisation to improve efficiency, transparency and certainty

Opportunities to standardise definitions, processes

- Different terminology and concepts are used across the Basin States
- Appears to contribute to the problem of over allocation

- “The over allocation and/or overuse of water resources is still being addressed by governments in different ways in different states. The Commission considers that a number of states do not meet the requirement of the NWI to move to sustainable levels of extraction. The Commission is strongly of the view that a new shared national understanding of over allocation is required which reconciles the varying approaches (and terminology) used by states”.
 - ▶ National Water Commission - biennial assessment of progress under the National Water Initiative (NWI)

Inefficient trading, transfer processes

- Market may not be functioning as effectively as it might because of
 - ▶ inefficiencies in the rules and administrative procedures
 - ▶ lack of resourcing
 - ▶ problems with the development and enforcement processes

To the extent the market is not functioning as effectively as it might, this is more to do with frictions caused by certain rules and administrative requirements related to the processing and approval of trade, including at the interstate level but also within states

Price Waterhouse

Lack of resourcing

- Anecdotal evidence suggests inadequate resourcing of transfer processes is a significant issue
- May be related to some combination of
 - ▶ a lack of clear accountability on agencies to ensure effective transfer processes
 - ▶ a lack of clear responsibilities where cooperation is required between multiple agencies
 - ▶ conflicts of interests
 - ◆ some water agencies may have an interest in water use occurring locally
 - ▶ a lack of clear performance measures
 - ▶ a lack of incentives or sanctions for poor performance
- Lack of clarity and consistency around the development and enforcement framework for the trading rules applying to different water businesses / resources

Provision of information

- Market should meet the analysis requirements and information dissemination needs of parties
- In some areas, information could be more freely and transparently available, and subject to improved quality control

Environmental water

- Best viewed in the same way as other holders of water, and potential purchasers of water rights.
- Once rights have been allocated, any changes in providing water for the environment should be transacted through the market
- Decisions about purchasing and trading by the environmental water holder should be transparent
 - ▶ Can have a major impact on trading market, value of water rights
 - ▶ Financially supported by government (in contrast to most other entitlement holders)

Registry arrangements

- The NWC notes shortcomings with current registry arrangements
 - ▶ All registers of states in southern MDB, where trade across borders is physically possible, do not yet reflect the essential characteristics for national compatibility
 - ▶ However, this has not prevented interstate trade from occurring....
- This is an area which has had significant input from states
- Issues of entitlement security, coverage and interoperability are still to be resolved

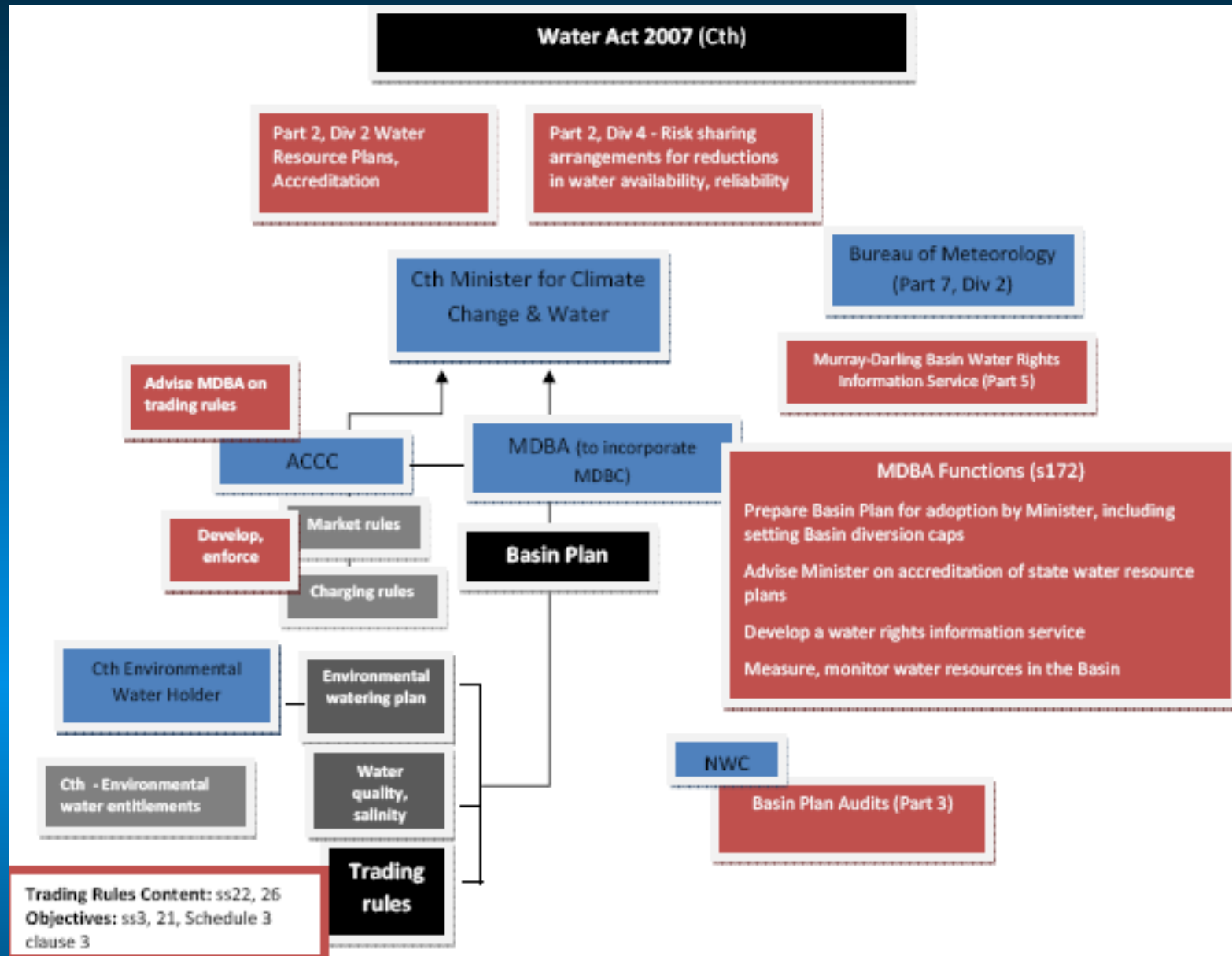
Water accounting

- Water accounting systems and measurement practices between and within states are not adequate in some areas, vary widely
- Significant reforms have been proposed
 - National Water Accounting Development Project
- Work in progress

“ The outcome of water resource accounting is to ensure that adequate measurement, monitoring and reporting systems are in place in all jurisdictions, to support public and investor confidence in the amount of water being traded, extracted for consumptive use, and recovered and managed for environmental and other public benefit outcomes.”

- NWI, Para 80

Roles and Functions under the Commonwealth Water Act



The current statutory framework Links between Commonwealth and State Laws

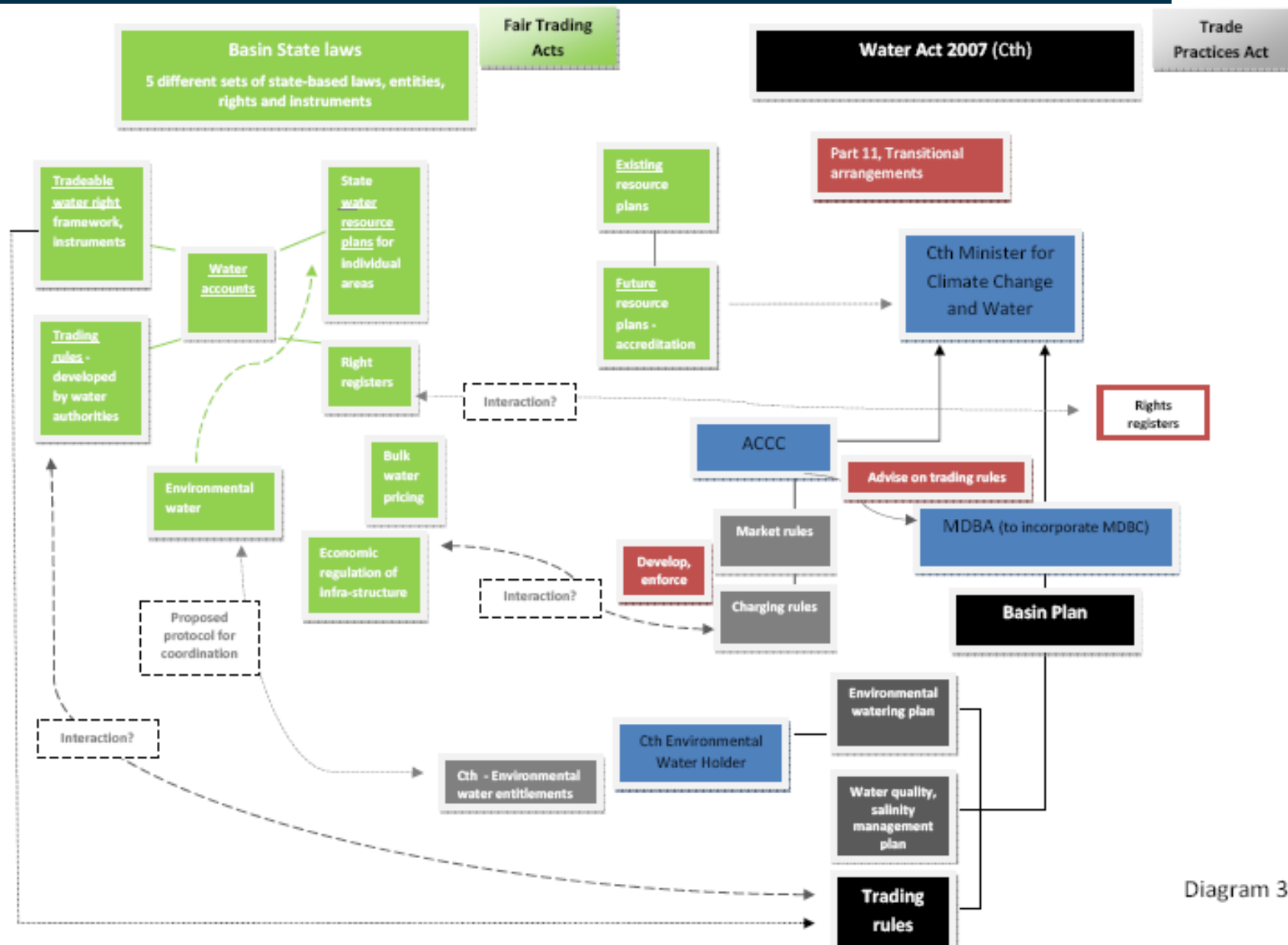


Diagram 3-

Statutory Framework - Desirable characteristics

- Desirable first principles characteristics for the statutory framework to support water trading generally
 - ▶ Clear, unambiguous drafting
 - ▶ Standardisation
 - ▶ Use of appropriate instruments
 - ▶ Flexibility
 - ▶ Distinguish between policy, regulatory and operational roles
 - ▶ Promote sound governance
 - ▶ Promote best practice regulation

Statutory objectives

- Desirable for statutory objectives to be reviewed and simplified
 - ▶ Many statutory objectives under the Water Act, drawn from a number of sources
 - ▶ Potentially ambiguous or inconsistent
 - ▶ Objectives do not expressly bind decision makers
- Note National Electricity Law has a single economic objective which binds all decision makers (including Ministerial Council on Energy)

Statutory Models

Model	1	2	3	4	5
	Each jurisdiction legislates for its own geographic area / constitutional responsibilities	Each jurisdiction legislates for its own geographic area with non-binding obligations (IGAs) / financial incentives to achieve common objectives	Ceding of some state powers only State and Commonwealth Acts intended to operate concurrently (dovetail together)	Uniform or co-operative national legislation	Ceding of all powers to the Commonwealth
Example	Past MDB practice	Use of national competition payments to achieve national energy reforms (1990's)	Current position in MDB with Commonwealth Water Act 2007, and Basin State laws	National Electricity Law	Aspects of Family Law

Statutory models

- Experience suggests that Model 1 has not been able to adequately achieve desired environmental and market objectives in the Murray-Darling Basin.
- Current Model 3 is more likely to work effectively if
 - ▶ Decision making at Commonwealth and State levels is governed by common statutory objectives
 - ▶ There are significant financial incentives for Basin States to achieve agreed milestones in reform
 - ▶ The Commonwealth (or Commonwealth sponsored bodies such as Ministerial Councils) provides clear guidance and models to be adopted by States (e.g. standards, rules, etc)
 - ▶ Each jurisdiction's statutory framework reflects best practice in terms of governance and regulation
- May be a case for moving to Model 5

Assessment of statutory models

- Significant impediment to models 1 to 4 succeeding
 - ▶ strong incentives for Basin States and agencies to act in their own economic, political and environmental interests, to the detriment of achieving broader Basin outcomes.
- The good will of Basin states to achieve sound common Basin-wide objectives is unlikely to withstand strong countervailing pressures on individual Basin States and agencies to protect and preserve state-based interests.
- Such tensions can result in:
 - ▶ Delays in national reforms
 - ▶ Inappropriate compromises
 - ▶ Deliberate ambiguity in statutory provisions
 - ▶ Barriers to trade
 - ◆ Eg inefficient transfer processes, inadequate resourcing,
 - ▶ Exploiting any ambiguities or inadequacies in the regulatory framework

Assessment of statutory models

- Spectrum of measures to address such incentives:
 - ▶ establishing clear performance measures
 - ▶ monitoring and exposure of decisions that diverge from common national objectives
 - ▶ overriding inconsistent state / agency decisions
 - ▶ handing responsibility for establishing a framework that is consistent with agreed objectives to an independent body or the Commonwealth
 - ▶ monetary or other incentives for implementing certain agreed reforms