

Rural Water Use and Environment: The role of market mechanisms. - Productivity Commission Discussion Draft June 2006.

Submission prepared by the Water Steering Group Horticulture Australia Limited

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1 Introduction

This submission has been prepared by the Water Steering Group of Horticulture Australia Limited. It provides comments in line with its original submission, but in response to the key points identified by the Productivity Commission.

In the following section the key points from the Productivity Commission Report are reproduced. The Water Steering Group's response follows in italics.

2 Key Points and *Response*

2.1 Markets are already making a significant contribution to allocating rural water to higher value uses. But institutional arrangements for water need more reform to further improve rural water-use efficiency and address water-related environmental externalities.

We are concerned that Government involvement in the water market is likely to distort the water prices above the value of productive use

- ❑ *Government intervention into water markets needs to be controlled and limited so that water prices are not inflated above their irrigation productive value and so do not put expanding irrigation businesses (or those purchasing due to low allocations) at a disadvantage*
- ❑ *We support the development of options that enable new water-related products that enhance risk management flexibility of irrigators*
- ❑ *Government intervention must be transparent and consistent with the rules of other water purchasers and sellers.*

Catchment Management and Planning

- ❑ *We support development of Sustainable Water Plans and Water Sharing Plans. It is important that these plans consider the impacts of all water users demands and land use change (water sources). Stakeholders should be included in the development of these plans.*

- ❑ *We support the involvement of local management in the decision making process at a catchment level and promote principles of accountability and transparency.*
- ❑ *Horticulture is keen to engage with these processes. The Horticulture NRM Strategy outlines a vision for industry and how it can engage with industry tools such as the Horticulture for Tomorrow Environmental Assurance Guidelines.*
- ❑ *We believe catchment management authorities should acknowledge the adoption of environmental management practices and environmental assurance schemes by horticulturists.*
- ❑ *We believe that catchment management authorities should endeavour to provide specific measurable agreed realistic and time constrained (SMART) farm targets that landholders can benchmark themselves against and are consistent with Resource Condition Targets in the Regional Catchment Strategies.*
- ❑ *We believe that CMAs should acknowledge the enormous investment and achievements of the horticultural industry in natural resource management.*

Knowledge and Capacity Building

- ❑ *Improved participation in training across all users and providers of irrigation is essential to further enhance the implementation of best practice and achieve environmental goals.*
- ❑ *Horticulture in partnership with government and industry associations has been successful in developing and delivering a range of training and certification programs that have led to improved water management.*
- ❑ *We are keen to work in partnership with the natural resource managers to ensure that improved training and industry run certification programs are embedded in the implementation of programs. The Irrigation Association of Australia provides a suitable training framework and material for this purpose.*

Risk management of water allocations and treatment of external benefits to the environment

- ❑ *We support the development of risk management tools for use by irrigators, including market based instruments, and capacity sharing arrangements where irrigators are given control over their individual water storage yield versus water reliability trade offs.*
- ❑ *Where water allocation processes are used water managers should provide estimates to growers of the future probability of % allocation increases. This should be an indicator of future water availability with explicit adjustments for carry over, high priority rights, minimum and expected inflows and environmental flow commitments.*
- ❑ *Where irrigators create environmental benefits by changing the use of their water share then they should receive a credit for this. For example, a credit for increasing the use of "carryover" that creates an environmental benefit when dams spill.*

2.2 There are opportunities to improve entitlement and allocation regimes. Three priorities are: unbundling water entitlements and water use approvals; addressing linkages between ground and surface water, water use and return flows; and facilitating efficient intertemporal water-use decisions.

Requirement for a specified high level of water security

- ❑ *Water policy makers must recognise and provide horticulture with highly reliable water to provide security of investment in technology, which is the basis for the horticultural industry's global competitive advantage.*
- ❑ *We believe in providing greater certainty of water reliability to water users.*
- ❑ *Trade should be encouraged or introduced to reduce the risk and adjust to changes.*
- ❑ *Developments in urban water policy need to consider the impacts on adjacent horticulture users.*

Water Use/site use licences

- ❑ *Site use licences should be developed in conjunction with industry to avoid unnecessary duplication with existing monitoring and reporting programs.*
- ❑ *We support the use of Horticulture for Tomorrow Environmental Assurance Scheme to govern the water user's obligations. This scheme can also refer to local conditions set by Regional Catchment Management Authorities.*
- ❑ *Site use licences should not be prescriptive and must focus on environmental outcomes rather than inputs. For example well-managed furrow irrigation can be more efficient than poorly managed drip, and should be allowed where this can be demonstrated.*

Catchment Water Use Limits or "Caps"

- ❑ *Groundwater resources need conjunctive assessment and management with surface water resources. This should include recognition of the benefits of groundwater pumping for salinity control.*
- ❑ *Moratoriums on expansion in water use (water caps) should apply equally to domestic, rural residential and industrial consumption not just irrigation. For example, the proliferation of extra domestic and stock catchment dams should be controlled where they are outside of the controls of farm dams legislation and yet may still have an impact on water availability downstream.*

- *We support management arrangements that will prevent erosion of the water share to existing users. Land use changes that reduce water availability downstream should require purchase of water entitlement. But the benefits of positive land use change should be recognised and not inadvertently discouraged. (for example lower salinity in some catchments that can arise from tree plantings are not lost).*

Characteristics of Water Entitlements

- *Water shares should specify both expected volume and reliability. Changes in future expectations in volume or reliability should be publicised by water resource managers to all entitlement holders (irrigators).*
- *Order of priority of different water shares should be made explicit to water entitlement holders eg. urban, domestic & stock, permanent plantings, annual plantings. Where high value permanent plantings are a higher priority than annual or lower value irrigation. The equity issues around unlimited access for stock and domestic and new rural fringe developments should be defined and in stressed catchments should come from pre-existing entitlements.*
- *We would like to see the resource access level priority framework recognise higher priority for permanent horticultural plantings ahead of annual crops. The cost of replanting can be up to 7 years production loss. This is very important where irrigators do not have access to water trade to help manage the risk of inadequate water allocation.*
- *Defined security of tenure of licences is crucial for long-term investment to occur, especially in horticulture where the time frame for break-even can be a decade and the life cycle of an investment can be several decades. Perpetual tenure is preferred.*
- *We believe in the principle that changes in water policy that result in reductions in average expected volumes of water to irrigators should be compensated for.*

Consideration of urban water restrictions on the nursery and garden industry

- *In urban systems water restrictions should be made more equitable rather than targeting outdoor use only, which unfairly hits the nursery and garden industry, while leaving other industries unaffected.*
- *We are concerned that current urban water restrictions are not effective or consistent and are lacking scientific basis. Mandatory water savings are being sought only from a proportion of water used by urban users. This is inequitable, inefficient and causing significant economic damage to small business.*
- *We would like to see a review undertaken on urban water restrictions at a national level and as soon as possible. There would be significant benefits in a coordinated consideration of the various approaches and the science that underpins them. Expert input from the horticultural and irrigation industries has been missing in most approaches to date.*
- *We support a national approach to see long-term water conservation measures developed and agreed that will significantly reduce the need for the current short-term crisis management of urban water.*

- ❑ *Water authorities need to provide a clear process for industry involvement in the development and review of urban water restrictions.*
- ❑ *Water restriction policy should be developed in conjunction with the nursery and garden industry and any other irrigators that may be affected to avoid any unintended consequences to industry.*
- ❑ *We recommend that regional urban water authorities should consult with the nursery and garden industry in their region to avoid any unintended consequences that may arise from permanent water saving measures.*
- ❑ *We support initiatives to increase access to reclaimed water.*
- ❑ *We encourage education on the perceived risks of reclaimed water use, to avoid any unnecessary consumer concerns.*
- ❑ *We encourage government to provide high quality Class A water, or other water quality that is appropriate to purpose, to existing horticulture that is short of water.*
- ❑ *We believe that pricing of reclaimed water should be consistent with industry ability to pay.*

2.3 A number of impediments to water trade reduce economic efficiency and should be removed. In particular, governments should:

- ❑ **allow other participants to trade in water markets;**
- ❑ **open up interdistrict water entitlement trade;**
- ❑ **remove exit fees;**
- ❑ **improve the transparency of trading rules; and**
- ❑ **benchmark approval processes.**

We offer cautious support for water trading and water entitlement "unbundling"

- ❑ *Governments have been keen to promote water trade to shift water from low value to high value irrigation. Horticulture has been able to grow as a result of water trade and also to better survive droughts by buying water from lower value use. However, it is important to realise that high value use is only preferable when it is profitable and can be sustained.*
- ❑ *All new developments must be market driven with a sound business and marketing case. Higher value use is not sustainable if it is not profitable or over supplies existing markets.*
- ❑ *Sustainable profitability depends on a number of things that are not well reflected in the gross return on water. Other aspects are market trend, capital and operating costs, and the need*

for supporting infrastructure. Governments should be discouraged from using simple gross value and gross margins in comparing the potential profitability of enterprises.

- ❑ *Shares of delivery capacity are supported, provided they can be traded to enable properties to upgrade their service levels. Also that they are not used to maintain inadequate infrastructure or services when upgrades are required and are cost effective and supported by water users.*
- ❑ *Water charges (and exit fees) should only be applicable to those properties that receive service or wish to retain future access to the service. Water charges should not restrict trade from properties that choose to permanently cease irrigation.*
- ❑ *We support open trade provided that the impacts on irrigators who are left on “stranded assets” are dealt with in a fair and reasonable manner and community impacts are considered. This means that such irrigators are given a range of options rather than be expected to solely meet the entire cost of maintaining unviable infrastructure.*
- ❑ *We do not support a uniform environmental levy on trade. Trade is not responsible for all environmental costs and may provide benefits.*
- ❑ *We support greater consistency in trading rules across regions.*
- ❑ *Where irrigators create environmental benefits by changing the use of their water share then they should receive a credit for this. For example, a credit for increasing the use of “carryover” that creates an environmental benefit when dams spill.*
- ❑ *Government involvement in water markets should be limited and strictly controlled so that it safeguards water markets from being inflated above their productive irrigation value.*
- ❑ *Agree with improving transparency and benchmarking approval processes.*

2.4 Careful specification of environmental objectives is required. Some tradeoffs are inevitable, and mixes of policy instruments may be necessary. Environmental goals should be underpinned by assessment of the costs and benefits of action, and monitoring of the outcomes achieved.

Recognition of need for sensible environmental flows which have specific measurable outcomes

- ❑ *We recognise the need for environmental flows to maintain river and catchment health, but this should not be achieved by a gradual erosion of water shares to existing users without compensation for that loss.*
- ❑ *In implementing environmental reserves it is important that the rights of existing users are not diminished without compensation.*
- ❑ *We do not support an increased environmental reserve when the environmental outcome is not achievable due to other threatening processes (eg. pest plants) that are not adequately*

addressed. A holistic approach to river and riparian health is required rather than a focus on flow alone.

- ❑ *Environmental reserves are supported where they are included as part of a clearly specified program within a holistic environmental management framework with clearly articulated environmental outcomes.*
- ❑ *Where over allocation has occurred we support partnerships of communities, water users and government working together to establish agreed environmental needs and water services.*
- ❑ *We seek opportunities for irrigators to actively manage river systems by providing conjunctive use of water for both environmental needs and for consumptive use downstream (joint use).*
- ❑ *We support mechanisms to enable irrigators to take on environmental management responsibilities and provide water donations to the environment, especially where these mechanisms allow water to be donated for specific river reaches or wetlands.*
- ❑ *It is crucial that good governance arrangements are in place and are transparent, for environmental water and that environmental flows are not put in place without the necessary supporting works (eg. Weed control, grazing management, fish passage) to ensure the maximum environmental benefit is achieved from the flow.*

2.5 'Saving' water via major infrastructure works to achieve environmental objectives is often costly compared with other options and may not increase water available for the environment.

Water savings may also be found through the development of new technology and management systems

- ❑ *Irrigation research should be a higher funding priority. This is warranted given recent increases in water scarcity and water value.*
- ❑ *We encourage Governments to work in partnership with other states to avoid duplication of research. Eg through the Cooperative Research Centre for Irrigation Futures.*
- ❑ *We encourage water providers also to contribute to joint research projects, which are of benefit to their customers and reducing the cost structure of their organizations. We would like to see research into new technologies that can improve the performance and lower the lost of rural water supply systems and service levels;*
- ❑ *Horticulture Australia Limited is a funding partner of the National Program for Sustainable Irrigation, administered by Land and Water Australia, and sees great benefit of a coordinated national approach.*

2.6 Environmental managers and service providers should be able to enter water markets and develop portfolios of water and water-related products.

We are concerned that this is likely to distort the water market above the value of productive use

- ❑ *Government intervention into water markets needs to be controlled and limited so that water prices are not inflated above their irrigation productive value and so do not put expanding irrigation businesses (or those purchasing due to low allocations at a disadvantage*
- ❑ *We support the development of options that enable new water-related products that enhance risk management flexibility of irrigators*

2.7 The Living Murray Initiative could be implemented more effectively if existing water-sourcing arrangements, including the purchase of permanent water entitlements, are supplemented with additional market mechanisms (such as trading allocations, leases and options contracts).

See 2.6 above.

2.8 A variety of market mechanisms could combat the emergence of salt, but they would need to be targeted appropriately to location and scale. Cap and trading schemes seem most suited in a catchment and/or basin context, whereas offset, tender and related market mechanisms seem more appropriate at an individual property level. It may also be possible to establish markets to flush salt out of basins.

Support the development and testing of market mechanisms, provided the transaction costs, monitoring and administration do not exceed the benefit achieved. It is also important that any parts of the irrigation community that are adversely affected are given adequate time and assistance to adjust.

2.9 It is difficult to devise efficient and effective taxes on rural water use to address environmental externalities.

Agree and note that it is inequitable to charge current and future generations for environmental damage that has resulted from previous government policy and previous generations.