Response to Productivity Commission Report on Market Mechanisms for Recovering Water in the Murray Darling Basin.

Horticulture Australia Limited (HAL) has established an industry Water Initiative and steering committee to provide a coordinated approach to water issues in horticulture and promote responsible water use. The objective of the Initiative is "*Ensuring access to water for responsible and profitable horticulture*

1 Background

The horticultural component of the irrigation industry is worth more than $6 billion per year in production and involves over 20,000 businesses and over 100,000 jobs. Horticulture represents close to 50% of the value of production generated by irrigation and more than this when the urban activity associated with turf, nursery and garden industries is included.

Access to adequate, reliable and secure water supplies is a fundamental requirement for all horticultural enterprises and is vital to horticulture's future. It is for this reason that Horticulture Australia Limited has its own program to research and promote responsible water use.

The Across Industry funded Horticultural Water Initiative has been set up by Horticulture Australia Limited to provide a coordinated approach to water issues in horticulture.

2 Water for Horticulture

Horticultural crops use about 17% of total irrigation use (ABS 2002/03) and produce over 40% of Australia's irrigated production. Figures suggest that for every 100ML of water used in horticulture $250,000 and four jobs are generated at the farm gate.

The horticultural industry has continued to increase the efficiency of water use, through the adoption of technology and better on-farm water management. The industry is at the forefront of developing and using new technology for soil moisture sensing and irrigation scheduling to ensure high efficiency of water use. There remains considerable scope for improved water use efficiency (and water management) and the industry is committed to, and will continue to address the water resource issues.

3 Relevant Policy Positions of the Water Steering Committee

The Horticulture Water Initiative has a number of policy positions that are relevant to the Productivity Commission issues paper - Market mechanisms for recovering water in the Murray-Darling Basin.

3.1 Requirement for a specified high level of water security

1) The horticulture industry seeks recognition from water managers and the community that horticultural enterprises require highly reliable water supplies and resource managers will work towards ensuring secure access to adequate water allocations.
2) Water policy makers must recognise and where possible 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.
3) Horticultural producers value systems that facilitate trading of water entitlements as a mechanism to secure adequate water supply, manage risk or adjust to changing resource availability. Greater certainty should be provided to water users through the provision of information regarding water reliability.
4) Developments in urban water policy need to consider the impacts on horticulture users.

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

1) Horticultural industries recognise the need for environmental flows to maintain river and catchment health.
2) Environmental flows should be secured in a way that does not erode water allocations of existing users, unless full compensation for any losses is provided.
3) Implementation of environmental reserves should consider that the rights of existing users are not diminished without compensation.
4) Increased environmental reserves/allocations are not supported 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.
5) Environmental reserves/allocations are supported where they are included as part of a clearly defined and holistic environmental management framework with clear environmental outcomes.
6) Where over allocation of water resources has occurred partnerships of communities, water users and government are required to establish agreed environmental needs and water services.
7) Opportunities are sought for irrigators to actively manage river systems by providing conjunctive use of water for both environmental needs and for consumptive use downstream (joint use).
8) Mechanisms are supported that enable irrigators to voluntarily implement environmental management practices and provide water donations to the

environment, especially where these mechanisms allow water to be donated for specific river reaches or wetlands.

9) Sound and transparent governance arrangements for environmental water allocations must be in place. Implementation of environmental flows must be accompanied with the necessary supporting works (eg. weed control, grazing management, fish passage) to ensure the maximum environmental benefit is achieved from the flow.

3.3 Catchment Water Use Limits or "Caps"

1) Groundwater resources need conjunctive assessment and management with surface water resources. This should include recognition of the benefits of groundwater pumping for salinity control.

2) 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.

3) Management arrangements are supported 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. The benefits of positive land use change should be recognised and not inadvertently discouraged (eg. lower salinity in some catchments that can arise from tree plantings are not lost).

3.4 Characteristics of Water Entitlements

1) Water shares/entitlements should specify both expected volume and reliability. Expected changes in future volumes or reliability should be publicised by water resource managers to all entitlement holders (irrigators).

2) Order of priority of different water shares/entitlements should be made explicit to water entitlement holders (eg. urban, domestic & stock, irrigators where permanent plantings are generally a higher priority than annual or lower value irrigation).

3) Unlimited access for new stock and domestic and rural fringe developments is not supported. In stressed catchments this should be covered by entitlement and expansion should be within the catchment cap.

4) High priority for water security of permanent horticultural plantings should be recognised. 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.

5) 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 water entitlements are sought.

6) Changes in water policy that result in reductions in average expected volumes of water to entitlement holders should be compensated.

3.5 Cautious support for water trading and unbundling of land and water titles

1) Governments have been keen to promote water trade to shift water from low value to high value uses. Horticulture has been able to grow as a result of water trade and also to better survive droughts by buying water on water markets. However, it is important to realise that high value use is only preferable when it is profitable and can be sustained.

2) 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.

3) 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.

4) Shares of delivery capacity are supported, provided they can be traded to enable properties to upgrade their service levels. They should not be used to maintain inadequate infrastructure or services when upgrades are necessary and are cost effective and supported by water users.

5) 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.

6) Open trade is supported 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. Open and fair trade in irrigation schemes must be underpinned by sound arrangements that meets the needs and addresses economic impacts of both irrigators and schemes managers. This means that such irrigators are given a range of options rather than expected to solely meet the entire cost of maintaining unviable infrastructure.

7) A uniform environmental levy on trade is not supported. Trade is not responsible for all environmental costs and may provide benefits.

8) Greater consistency in trading rules across regions is sought.

4 Response to Productivity Commission report questions

1. *Is the focus on acquiring entitlements the best way of achieving the environment's needs?*

Preservation of the integrity of entitlements is critical for irrigators, especially horticulture. This is necessary to clearly define the security of water and implement proper risk management. Government acquiring entitlements maintains this integrity.

More information is needed on what the environmental needs are i.e. how much water, when and where will be required. The opportunity for leasing water and forward contracts with irrigators should be considered.

Other key elements in acquiring environmental water include:-

- Farm upgrades in return for saved water (although it is acknowledged that the upcoming DEWHA $300 M "On Farm Irrigation Efficiency Program" is intended to address this).
- Supply Infrastructure upgrades (again this is included in the Water for the Future Plan).
- River management and operations.

2. *Is a 'no regrets' presumption a reasonable basis for purchasing entitlements, and at what point does this cease to be the case?*

It is not clear what the environmental requirements will be in some systems. Or indeed, if the environmental flow delivered can be sufficient with climate change to achieve rehabilitation of degraded river systems. The 'no regrets' presumption may therefore not be appropriate.

Definition of ecological goals and their water requirements are essential.

3. *What are the arguments for continuing the buyback after the new Basin Plan is implemented in 2011, and associated state water sharing plans start to be implemented in 2014?*

The Basin Plan should define the environmental needs much more tightly- how much water, how often and where. The Basin Plan should clearly define sustainable yields and environmental requirements. This can then inform the continued buyback.

The Principles of the National Water Initiative Risk Assignment Framework should be followed with regard to sharing of risks to water resources as a result of a changed knowledge, climate or other risks. This preserves expected future security of entitlements. See below:-

"48. Water access entitlement holders are to bear the risks of any reduction or less reliable water allocation, under their *water access entitlements*, arising from reductions to the consumptive pool as a result of: (i) seasonal or long-term changes in climate; and

(ii) periodic natural events such as bushfires and drought.

49. The risks of any reduction or less reliable water allocation under a *water access entitlement*, arising as a result of bona fide improvements in the knowledge of water systems' capacity to sustain particular extraction levels are to be borne by users up to 2014. Risks arising under comprehensive *water plans* commencing or renewed after 2014 are to be shared over each ten year period in the following way:

    i) *water access entitlement* holders to bear the first 3% reduction in water allocation under a *water access entitlement*;

    ii) State/Territory governments and the Commonwealth Government to share one-third and two-thirds respectively reductions in water allocation under *water access entitlements* of between 3% and 6%; and

    iii) State/Territory and Commonwealth governments to equally share reductions in water allocation under *water access entitlements* greater than 6%.

50. Governments are to bear the risks of any reduction or less reliable water allocation that is not previously provided for, arising from changes in government policy (for example, new environmental objectives). In such cases, governments may recover this water in accordance with the principles for assessing the most efficient and cost effective measures for water recovery (paragraph 79 (ii) (a) refers).

51. Alternatively, the Parties agree that where affected parties, including *water access entitlement* holders, environmental stakeholders and the relevant government agree, on a voluntary basis, to a different risk sharing formula to that proposed in paragraphs 48 - 50 above, that this will be an acceptable approach."

4. *What implications do environmental demands across the Basin have on the targeting of purchases and the mechanisms and instruments that should ideally be used?*

Water requirements of the icon sites based on specific ecological objectives need to be defined.

5. *How should environmental water be allocated across competing projects and sites?*

Environmental water allocation should be based on a priority system that provides greatest ecological benefit.

6. *Should the buybacks be designed so as to reduce structural adjustment costs or should adjustment be addressed separately? If the former, are there particular buyback mechanisms that should be used to do this? If the latter, what approach should be used?*

Structural adjustment should be tailored to each Region's specific needs. This may incorporate components of the buyback where appropriate. Structural adjustment may require other instruments that are more suited to addressing social aspects.

The buyback needs to account for its impact on regional communities, the

willingness to sell and match the timing of water purchases according to community situation.

Community input into the design of the buyback would be valuable.

7. *Does the exit grant package for small block irrigators play a useful role in the overall buyback scheme? Should it be offered again?*

The objective of the small block irrigators exit package was to assist irrigators leave farming, particularly horticulture. The requirement for maintaining 5 years of dryland creates a significant barrier to subsequent farm amalgamation and adjustment. It also threatens the viability of community irrigation districts that are left with a "swiss cheese" of stranded assets. This component should be reviewed.

The criteria for eligibility also needs to be reviewed.

8. *What impact has the Restoring the Balance program had on the price of water entitlements to date? What, if any, impact has this had on the market for seasonal allocations?*

The program would have increased the price of both entitlement and allocations, as there is less water in the consumptive pool for a given water demand.

The impact on the price of entitlements can be gauged by the difference in price paid by the Commonwealth versus internal trade (within the Victorian 4% cap).

The Weekly Times reported on September 9th that "the restrictions on trade have led to a slump in the price of high reliability water shares from a top of $2400 a megalitre in June to between $1800 and $2100."

9. *DEWHA is now publishing average prices paid for entitlements. What impact is this likely to have on bids in subsequent tenders or one-off purchases?*

The information provides a benchmark, however, many in the water market probably already knew this anyway.

10. *How much influence would the choice of market mechanism used to purchase entitlements for environmental purposes have on the market for water?*

Future contracts that are triggered by specified water allocations could make a difference in prices on temporary markets.

11. *What impact has the entrance of the Commonwealth (and other governments) into the market for water had on background trade in water between third parties?*

It is very difficult to separate the impacts of the drought from the entrance of the Commonwealth into the water market. All other things being equal the impact of the Commonwealth would be to push up prices for entitlement and this would act as a brake on planned farm expansion. This would have set back ongoing farm expansion and adjustment that is needed.

12. *How would speeding up or slowing down the Australian Government's water purchases influence the effects on trade between irrigators?*

Speeding up trade would push up water prices and vice versa.

13. What are the advantages and disadvantages of the different market mechanisms that could be used to obtain water for the environment? In particular, how do they compare in terms of compliance and transactions costs and the ability to meet the different watering needs of environmental assets?

The different watering needs of the environment need to be made explicit to be able to answer this question.

14. Are there other market mechanisms, not listed above, that the Commission should be considering?

All market mechanisms appear to be listed.

15. With the benefit of the experience gained from three tenders under the RTB program:• What are the advantages and disadvantages of the chosen rolling tender process?

A key disadvantage is the lack of clarity for prices. The advantage is that it is fairly straightforward.

16. • How could the tender process be improved?

No stop and start system, that leaves sellers in limbo. Clarity of dates when the tender is open and closed. Clarity of the mix of high and low security water products required would be useful. Also the program should consider leasing water.

17. • *How do you think an open market process would have fared instead?*

An open market would likely had a very similar impact.

18. *What mix of market mechanisms and water products should the Australian Government be using to achieve its environmental objectives?*

See response to question 13.

19. What examples of the use of market mechanisms for purchasing water entitlements or similar property rights are you aware of, and what lessons can be learned from these that might apply to purchasing water in the Basin?

Not aware of other market mechanisms.

20. • How substantial are or were these purchasing programs (for example, in comparison to the total stock of property rights concerned or the size of the relevant market)?

Not aware of other market mechanisms.

21. • *What institutional constraints might limit the degree to which those examples might apply to purchasing water in the Basin?*

Not aware of other market mechanisms.

22. Should water purchasing and infrastructure upgrades be coordinated and, if so, how?

Yes, to avoid stranded modernized irrigation upgrades this is essential.

23. What potential is there for a more cost-reflective approach to pricing of water delivery to obviate the need for targeting purchases of water?

Yes, some potential for this but probably not sufficient on its own.

24. *How well has the irrigator-led group proposal component of Restoring the Balance addressed the possibilities for taking group action that coordinates infrastructure upgrades and water sales? How could it be improved?*

This needs clear rules for sharing the saved conveyance water losses.

25. What impact is the 4 per cent limit having on the market for water entitlements?

Major impact. Internal trade prices have been lower than external trade.

26. What impact is it having on the effectiveness and efficiency of the Australian Government's purchasing programs (both under the RTB program and under The Living Murray)?

Unsure, except that prices are higher.

27. To what extent are irrigators who wish to sell their entitlement being disadvantaged by the limit?

They are receiving lower prices. The Weekly Times reported on September 9th that "the restrictions on trade have led to a slump in the price of high reliability water shares from a top of $2400 a megalitre in June to between $1800 and $2100."

28. Is a limit on outwards trade the best way to address concerns over possible socio-economic impacts on particular irrigation areas?

Should involve the local community in providing advice on how to address socio economic impacts for each Region.

29. Is the Commonwealth–Victorian agreement on the 4 per cent limit a satisfactory way to allow a greater quantity of entitlements to be purchased in Victoria?

Yes, it provides a way of avoiding the "swiss cheese" effects by integrating supply system modernisation with irrigation reconfiguration, while allowing commonwealth purchases above the 4% and 10% caps to occur.

Similar process should be considered for other jurisdictions to ensure " a level

playing field".

30. *What impact is the NSW Government's ban on sales of NSW entitlements to the Commonwealth for environmental purposes likely to have on the ability of the buyback to obtain water efficiently and effectively?*

Major impact as the largest diverter of water in the MDB is removed from the market.

31. How substantial are the impediments to trade in entitlements created by the imposition of termination fees?

Trade of water share entitlements does not trigger a termination fee. Therefore there is no impact.

The surrender of annual irrigation access charges (sometimes called delivery shares) attracts a termination fee. The requirement to make ongoing payments for irrigation access charges when all water shares are sold is an impediment. This requirement may need to be relaxed in areas where it is agreed that irrigation is not expected to have a long-term future. i.e. termination fees are waived.

32. Is the potential for irrigation assets to be stranded a relevant concern? Should some buyback mechanisms be preferred over others because they have a lower propensity to lead to stranded assets?

Yes, targeting buyback to identified and agreed non-viable or environmentally unsuitable areas could be preferential.

33. Are termination fees likely to help or hinder the efficient use of, and investment in, irrigation infrastructure during the buybacks?

See 31 above.

34. How can the right incentives for investment in irrigation infrastructure be achieved during the buyback program?

Ensure buyback is not occurring in viable, environmentally sustainable and low cost to supply areas.

Consider buyback of farm water savings and of supply infrastructure upgrades.

35. *What impact are termination fees likely to have on an irrigator's willingness to sell and the cost of the buyback?*

See 31 above.

36. Are the costs associated with trading water entitlements (including those associated with delays and lack of market information) higher than they should be?

Yes. Particularly for interstate trading.

37. Are these costs a significant impediment to the efficient operation of

government water buybacks and the water market more generally?

Yes.

38. *How might these costs be reduced?*

Well defined and streamlined processes.

39. To what extent have the CPGs restricted or limited the design of current DEWHA purchasing mechanisms and the decision to buy only water entitlements?

Cannot respond. Unsure of how the Commonwealth Procurement Processes (CPGs) is applied.

40. *What impact might the CPGs have on the Commonwealth's ability to use alternative purchasing mechanisms to buy water products other than water entitlements?*

Cannot respond. Unsure of how the Commonwealth Procurement Processes (CPGs) is applied.