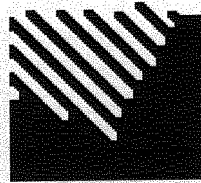


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HOUSE OF REPRESENTATIVES
STANDING COMMITTEE ON
AGRICULTURE, FISHERIES
AND FORESTRY



**NSW
IRRIGATORS'
COUNCIL**

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Submission to the

House of Representatives

Standing Committee on

Agriculture, Fisheries and Forestry

**Inquiry into Future Water Supplies for
Australia's Rural Industries & Communities**

October 2002

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List of Acronyms Used

ARMCANZ	Agriculture and Resource Management Council of Australia and New Zealand
BAR	Bulk Access Regime
COAG	Council of Australian Governments
IGA	Intergovernmental Agreement
INRM	Integrated Natural Resource Management
NAP	National Action Plan for Salinity and Water Quality
NCC	National Competition Council
NCP	National Competition Policy
NSWIC	NSW Irrigators' Council
PBT	Public Benefits Test
"The Act"	Water Management Act 2000 (NSW)
WSP	Water Sharing Plan

1 Summary of Recommendations

A vision for irrigated agriculture

That the Commonwealth support the development of a long-term vision for the irrigation industry and the management of our river and groundwater systems as the basis for effective policy development and decision-making.

Water access (property) rights

That the Commonwealth develop an agreed set of principles/characteristics for a water access (property) right (as outlined in this paper) and that this be incorporated, through an Inter Governmental Agreement, into the COAG process.

That the provision of comprehensive protection for any diminution of water property rights outside an agreed planning framework should be a minimum requirement under COAG water agreements.

That the Commonwealth Government actively engage the States and Territories, through the COAG process and on a cost-sharing basis, in the exploration of innovative approaches to finding additional environmental water. These investment solutions to be based, in order of priority, on:

- (i). system savings – investment in system and on-farm savings and inefficiencies;*
- (ii). voluntary buy-back or "market based" schemes; or*
- (iii). "just terms" acquisition*

That the Commonwealth develop an "enforceable" cost/benefit framework ("Public Benefits Test") to be included as a minimum requirement under COAG water agreements and as a basis for investment decisions (system savings, market schemes and if required "just terms" acquisition). Adherence to this framework to be strengthened through linkages to Commonwealth funding programs and National Competition Council assessment.

Water Trading

Water trading must be conducted within appropriate social, physical and ecological constraints of catchments.

Any comprehensive interstate trading regime must be underpinned by a robust administrative system & trading rules that are developed in full consultation with market participants.

Provisions must be made for the legitimate participation of the "environment" in the water trading market (on the basis that if government intervention is required on behalf of the environment that this does not send artificial price signals to other market participants).

Governments must not be allowed to abrogate their responsibility for just terms acquisition (or compensation) by shifting the onus onto entitlement holders to make adjustments at their own expense in the commercial water market.

Governments should recognise that trading is not the only adjustment mechanism available to ensure efficient, high-value use of the available water resource.

Any national framework for water trading must recognise the sovereignty of collective schemes, and provide for each of the schemes to set trade rules that protect the rights of the majority of members of the collective.

There should be no legislative restrictions on trade but area specific trading rules should be established through a legitimate community-based planning and consultative framework.

Accountability for the States

The National Competition Council must be provided with the necessary powers to ensure State compliance on water reform issues. This power must extend beyond the current tranche payment process.

In addition, the Commonwealth should report publicly on each State's compliance with COAG principles and any other agreed areas where Commonwealth funding for NRM issues is required (e.g. NAP).

Integrated Natural Resource Management

That the Commonwealth host a National Convention to debate the concept of Integrated Natural Resource Management, with the Convention to make recommendations to the Parliament for further Action

That the National Convention into Integrated Natural Resource Management be attended by organisations and individuals with broad ranging expertise in community and urban planning, natural resource management, economic and business development, social planning, and Local, State and Commonwealth Governments.

That the Commonwealth commit to introducing a system of Integrated Natural Resource Management, and develop a mechanism to ensure compliance by State and Local Governments.

Community Engagement

That the Commonwealth take a leadership role in implementing best practice community engagement and involvement in integrated natural resource management decision-making processes

That the Commonwealth include requirements to adopt best practice community engagement and involvement in decision making processes in all agreements of the Council of Australian Governments.

That the Commonwealth commit to ensuring that this best practice is both adopted and appropriately implemented by Commonwealth, State and Local Governments.

That the Commonwealth increase public investment in research and development into our understanding of natural systems, including the provision of long term research grants to appropriate tertiary institutions to ensure continuity of funding.

Incentive Schemes

That the Commonwealth continue to acknowledge and support the role of industry driven voluntary incentive programs, such as BMP, in achieving changes in the way landholders manage natural resources on their farms.

That the Commonwealth Government continue to support initiatives of industry in dealing with natural resource management issues.

That the Commonwealth commit to exploring a range of mechanisms to encourage efficient and sustainable on farm water use.

That the Commonwealth pursue opportunities either through the expansion of existing programs or the introduction of new programs to provide incentives to irrigators to improve sustainable water usage.

National Action Plan for Salinity and Water Quality

The focus of the NAP must be on sustainability at an 'on-ground' level – starting at the property level and progressing in a co-ordinated and integrated manner through the sub-catchment, catchment and Basin levels

2 Terms of Reference

- 1 The role of the Commonwealth in ensuring adequate and sustainable supply of water in rural and regional Australia.
- 2 Commonwealth policies and programs, in rural and regional Australia that could underpin stability of storage and supply of water for domestic consumption and other purposes.
- 3 The effect of Commonwealth policies and programs on current and future water use in rural Australia.
- 4 Commonwealth policies and programs that could address and balance the competing demands on water resources.
- 5 The adequacy of scientific research on the approaches required for adaptation to climate variability and better weather prediction, including the reliability of forecasting systems and capacity to provide specialist forecasts

3 Introduction

NSW Irrigators' Council (NSWIC) is the peak body representing irrigation farmers in NSW. We support a vision for a future in which we achieve from our natural resources the greatest possible long-term social, economic and environmental benefits for all Australians.

NSWIC values

- healthy ecosystems and catchments in which the integrity of soils, water, flora and fauna is maintained or enhanced wherever possible
- innovative and competitive industries that make use of natural resources within their capability, to generate wealth for social and economic wellbeing
- self-sustaining, pro-active communities that are committed to the ecological sustainable management of natural resources in their region.

Water users are mindful that they are part of a system that in many cases has been modified for well over 100 years. They also know that it would be impossible and socially devastating to attempt to return our rivers and ecosystems to a "pristine" state.

Many of our rivers are working rivers, delivering multiple outcomes from the whole community. This is a fundamental premise for water management that has not been widely recognised or accepted by environmental groups politicians and policy makers.

The landmark decision to introduce the Murray-Darling Basin Cap in 1995 was the start of the difficult path to reform. Almost a decade later we are still struggling with jurisdictional compliance even with this fundamental policy.

4 The role of the Commonwealth in ensuring adequate and sustainable supply of water in rural and regional Australia.

4.1 A Vision for Irrigation

Whilst the 1994 COAG Strategic Framework for Water Reform was an attempt to re-focus previous government(s) policy, it was developed without a well articulated long-term vision for both the community and the environment. Still debate is occurring on a range of water related issues without clear outcomes in mind.

This vision for irrigated agriculture needs to be created and driven by industry, with input from all stakeholders to ensure that it is a community owned vision. Fundamental to the vision is an acknowledgement of the impacts, costs and benefits that might emerge as a result of moving towards that vision.

NSW Irrigators' Council will be convening a visioning workshop in early 2003. *Focus 2025 – Irrigation our Future* will involve young people (aged 18-35) representing industry, community, indigenous and conservation interests discussing the long-term sustainability of our industries. The group will be charged with developing a vision communiqué as a starting point for debate by industry, the broader community and Governments at all levels, local, State, Basin and Commonwealth.

Recommendations

That the Commonwealth support the development of a long-term vision for the irrigation industry and the management of our river and groundwater systems as the basis for effective policy development and decision-making.

4.2 Water access rights

4.2.1 Background

The irrigation industry considers that ownership of "water access rights" is necessary if irrigators are paying the full price of water, are competing for the resource in the marketplace and require certainty of their investment for future development.

The debate is not about the issue of compensation *per se*, but rather security for past and future investment. Whilst compensation is one means of achieving such security there are a broad range of options that should be explored before water is compulsorily acquired. Irrigators also recognise that they have a responsibility to utilise the resource in a responsible manner and in accordance with principles agreed to in a legitimate planning and consultative framework.

There is some confusion (and misleading information) about irrigator concerns with what they see as a lack of clarity and certainty with regards to their ongoing ability to access water for commercial purposes.

The myth of privatisation of water is unfounded in reality – irrigators are not seeking 100% of their entitlement 100% of the time. Irrigators recognise that climatic variability and water-sharing rules (agreed to in a legitimate community planning process) will determine the basis of their annual allocation (the percentage of their licensed entitlement that is available for use from year to year). What they cannot accept is that arbitrary government decision-making can continue to erode their licensed entitlement without some form of accountability.

The path to asset security and good environmental outcomes should not be made more difficult than it needs to be. The concept of reform and the need for change is acknowledged and is achievable. Contrary to current belief, the process does not necessarily need to be an exercise purely about compensation but there must be equity in sharing the costs of change. The Government and the community must recognise that community outcomes require community solutions and community funding.

4.2.2 Key principles

There are five key principles that underpin the concept of water access rights:

- ❑ Rights must underpin the long-term social, economic and environmental sustainability of dependent regional communities - the majority of water users are not seeking a quick and financially rewarding exit strategy.
- ❑ Water access rights must be indefeasible, such that the strength of the right is demonstrated through the right to compensation in the event that the right is reduced or weakened in any way.
- ❑ There must be a consistent interpretation and application of the Council of Australian Governments (COAG) Agreement between all States. NSWIC is not opposed to the principles of the COAG water reform agenda (nor by implication the provision of environmental water) but it does have significant problems with the interpretation and implementation of the agreements by the current NSW Government and its agencies.
- ❑ Asset security and natural resource management (NRM) flexibility must coexist. Ongoing legislative and regulatory change is appropriate so long as it takes place within a secure market environment that recognises the need for asset and income security.
- ❑ "Public good" requires "public money". Government decision-makers must recognise and understand fully the implications of legislative change and be financially accountable for that change if it is deemed to be of a net benefit to the broader community.

4.2.3 The NSW system

The NSW Government, in implementing the NSW Water Management Act 2000, has adopted the view that the issue of property rights has been adequately dealt with through the provision of compensation clauses, the specification of greater detail in regards to the licensing system (categories, share of the resource and extended tenure) and the proposed register of licensed entitlements. This view has been reinforced in the NSW Government's response to the National Competition Council (NCC) on various aspects of its requirements on water reform under National Competition Policy.

Indeed, at the Commonwealth level there has been some endorsement of this position from the NCC, subject to some minor concerns over transitional arrangements, although NSW Irrigators' Council would argue that there serious flaws in the audit process for National Competition Payments (see section 6.1).

Despite the NCC's qualified endorsement, there has been significant controversy surrounding the implementation of Water Management Act 2000 and in particular the transition to the new regime of water sharing plans in each valley (and subsequently the implementation of a adequate water property rights regime).

4.2.3.1 Description of water rights under NSW system

In effect, the NSW legislation has created a ten year depreciating security over access to water. More specifically this includes:

- Licence periods of fifteen years.
- Planning periods of ten years (Water Sharing Plans).
- Compensation claimable for changes made inside the planning period at the Minister's discretion. That is, compensation linked to the planning period not the licence period.
- No compensation payable outside the tenure of each planning period.
- Annexed supplementary water licences and no compensation payable for reductions in access to supplementary water.
- Separate water use approvals.
- Separation of share component (volume) and extraction component (flow rate) within access licence approvals.

There are a number of problems with the NSW system and these include:

- Security is linked to the Water Sharing Plan (WSP) but the tenure of the WSPs is not sufficient to allow long-term capital investment or investment in environmental improvement.
- The strength of the right within the ten year planning period is undefined and untested either in law or in practice.
- Before and after each ten year planning period complete uncertainty exists regarding the value of water rights. Flexibility without security is unacceptable to irrigators.
- There is still significant uncertainty surrounding the decision-making roles of the water management committees versus the Department of Land and Water Conservation and the relevant Minister(s). Without a clearly defined decision-making hierarchy, an attempt to introduce state-wide "one-size-fits-all" policies has created significant tension during the planning process.
- The current approach of linking compensation to the WSPs is not the best option for effective environmental management. This approach elevates the antagonism between stakeholder groups because it places the need for "adaptive environmental management" in direct conflict with the need for "long term investment security".
- Innovative solutions are discouraged and whilst the payment of compensation is one means of achieving security for investment it does not adequately address the flow-on impacts to regional communities. Other

options such as investment in system savings and structured voluntary buy-back schemes have not been explored.

- The Water Management Act 2000 provides significant flexibility for the Minister to use administrative powers and in so doing attenuate (further) the right as currently defined.

4.2.4 Defining water access rights

Property rights and responsibilities are given expression through law (common or legislation), custom or tradition. The Productivity Commission has defined four main characteristics of an efficient property rights system:

- *Universality – all resources are privately owned and all entitlements (rights over how they can be used) are completely specified; and*
- *Exclusivity – all benefits and costs that result from owning and using the resource only accrue to the owner, either directly or indirectly by sale to others; and*
- *Transferability – all property rights are transferable from one owner to another in a voluntary exchange; and*
- *Enforceability – property rights are secure from involuntary seizure or encroachment.¹*

In varying degrees, all “property rights” result in the conferral of three qualities (or capacities):

- a management power;
- an ability to receive income or benefits; and
- an ability to sell or alienate the interest.

The degree to which these three qualities are evident in a particular property right depends on the mix of fundamental characteristics that the particular property right contains.

Recent work by Sheehan² has identified six defining characteristics of water rights based on work by Scott,³. Scott describes a test for property rights which relies upon the identification of a minimum of six fundamental characteristics which he asserts to be present in any property right as follows:

¹ Arentino *et.al. op. cit*, p. 11

² Sheehan, J. Advice on Water Property Rights – A Report Prepared for the NSW Irrigators Council November 2000

³ Scott, A Evolution of Individual Transferable Quotas as a Distinct Class of Property Right edited version of a paper presented at the NATO Conference on rights-based fishing, Reykjavik, June 1988 and the APPAM Conference, Seattle, January 1989.

Duration - indicating the period usually in years that the property right is held, and hence represents a profit or saving to the holder.

Flexibility - a property right should be susceptible to modification and/or alteration. In the context of water property rights, this aspect will almost certainly be a product of the particular regional circumstances within which the water entitlement and use occurs (including climatic variability and system constraints).

Exclusivity – being the inverse of the number of holders of the same or similar property right. Clearly, a reduction in the exclusivity will reduce the profit or saving enjoyed by the holder.

Quality of Title - the descending level of security as the tenure falls away from the optimum of notional freehold.

Transferability - the measurement of the market for the sale or leasing of the particular property right. A high value indicates that the demand reaches well beyond the original acquiring group, and that the mere creation of a market and hence tradeability in itself enhances the value of the particular property right.

Divisibility - the property right may be capable of being shared between a number of holders over one territory or the territory itself maybe subdivided and each new part held separately. In the context of water property rights, there will be limits to divisibility of access and usage, beyond which the right becomes degraded, almost certainly uneconomic, and devalued.

Importantly, all six characteristics are required to define the right. Scott shows how when just four of these characteristics are varied, the worth of a particular property right can change.

ARMCANZ considers that a 'property right' exists

*"...when the community supports and protects the exclusive use and enjoyment of an entitlement and allows that entitlement to be traded or passed to others."*⁴

In practical terms, NSWIC takes the view that a right will have been established when:

- **Fixed shares of the available resource are issued with a defined yield and reliability of supply**

Irrigators manage their investments within the uncertainty created by seasonal conditions. Water availability varies from season to season as climatic conditions change. Through a long history of data collection and improved hydrologic modelling capability, such uncertainty can be

⁴ ARMCANZ Water Allocations and Entitlement: A National Framework for Implementation of Property Rights in Water, Task Force on COAG Water Reform Occasional Paper Number 1, Canberra 1995, p. 4

theoretically described with reasonable accuracy. Certainly, there is sufficient accuracy to be able to define a regime of water availability that derives from any given set of management rules.

- **Just terms acquisition is triggered when access to, or reliability of supply of these shares are in any way diminished other than through seasonal variability and/or long-term climate change**

Water property rights must be secure from involuntary seizure or encroachment. From a NSW perspective, the *Land Acquisition (Just Terms Compensation) Act 1991 (NSW)* provides a legislative framework, which could accommodate provisions for compulsory water acquisition. This Act provides guidance in terms of process, valuation and dispute resolution, taking into account the asset value and income effects when determining the acquisition value.

- **The legislation compels exploration of all other community investment/savings options before resorting to just terms acquisition. Shares are treated in the same manner as real property.**

Just terms acquisition, whilst fundamental to a water property rights system, must be regarded as the last resort option for resolving water sharing issues. Legislation should compel governments to first explore more innovative investment solutions, including, in order of priority:-

- (i). system savings – investment in system and on-farm savings and inefficiencies
- (ii). market schemes – voluntary market-based buyback where government either “stands” in the market or initiates reverse tender schemes
- (iii). just terms acquisition

Investment decisions in each case must be based on a full assessment of the social, economic and environmental costs and benefits, a “Public Benefits Test”. Such a Public Benefits Test (PBT) would:

- provide an assessment of the full economic and administrative costs of all natural resource management and environmental proposals,
- provide an assessment of social and other benefits and costs arising from the proposal,
- identify those sections of the community that will incur the costs and those that will enjoy the benefits,
- demonstrate how the proposal generates a net public benefit for the community,

- demonstrate that no other viable options exist whereby the same net public benefit could be generated using non-regulatory options,
- include a change management process – a clearly defined strategy of implementation that includes a process of identifying and remediating costs at a community and individual level.

When exploring investment options the following principles should be considered as part of a comprehensive PBT:

- (i). Maximum value for money - this is effectively described as the greatest possible yield of savings for the lowest financial outlay. It is not simply a case of comparing megalitres per dollar, since there will be differences between the associated yield of megalitres resulting from savings in losses, for example, versus yield resulting from purchase of shares, the former resulting in higher net gains to the environment.
- (ii). Additional environmental outcomes - where possible the works/schemes should seek to concurrently generate additional environmental outcomes. For example, the piping of "leaky" channels will not only create water savings for the river but also prevent further accessions to the water table and thus have more "localised" environmental outcomes.
- (iii). Additional socio-economic outcomes - where possible the works/schemes should seek to concurrently generate additional socio-economic outcomes. For example, creation of savings via conversion to high tech irrigation schemes for horticulture will result in additional productivity outcomes through improved quality control. Conversely, preferred options should also be those that minimise socio-economic disruption and the need for consideration of adjustment issues.

Investment should be underpinned by government funding commitments but the legislation should also make provision for private-public investment partnerships where interest exists.

□ Shares are treated in the same manner as real property.

The best form of tenure for water rights would be a class of title issued under an amended *Real Property Act 1900 (NSW)*, strongly reminiscent of the Certificate of Title issued under the Torrens Title system.

□ Shares can be used as collateral to secure financial dealings.

It is recognised that both security and tradability require that the form of tenure is capable of acting as collateral for a mortgaged-based loan from banks or other financial institutions. From this line of reasoning, it can be

concluded that the tenure must evidence qualities with which lenders are comfortable and familiar.

Lenders are familiar with loans, which in the main are secured by way of a mortgage over freehold land, specifically land which is held under the *Real Property Act 1900 (NSW)*. This enables a lender to have a registered first or second mortgage, or a caveat placed upon the public register of those land titles issued pursuant to that Act.

Tenure is unlimited in time, and guaranteed by the *Real Property Act 1900 (NSW)*. There is security of tenure at the highest level, and the sale or transfer of the property rights held under this form of title can readily occur subject only to a restriction that stamp duty and statutory charges be paid at the time of sale or transfer.

□ **The ability to transfer is part of the right and the rights to transfer are defined.**

Transferability, is the measurement of the market for the sale or leasing of the particular property right. A high value would indicate that the demand reaches well beyond the original acquiring group, and that the mere creation of a market and hence tradability in itself enhances the value of the particular property right. In the context of water property rights, this characteristic could also be referred to as tradability.

The property right may be capable of being shared between a number of holders over one territory or the territory itself may be subdivided and each new part held separately. It may also be possible for the holder to divide his right on the basis of seasons or in the case of fishing rights, on the basis of particular marine species.

In the context of water property rights, there will be limits to divisibility of access and usage, beyond which the right becomes degraded, almost certainly uneconomic, and devalued.⁵

4.2.5 The way forward – making the most of NSW legislation

4.2.5.1 Transitional issues to be resolved

- An adequate register needs to be established with a clear audit trail to WSPs (including modelled data to illustrate security and reliability of water under the WSP operating rules).
- An amendment is required to ensure register is indefeasible, reflecting the Torrens Title systems. These amendments are along the lines of those in the *Real Property Act 1900 (NSW)*.

⁵ Sheehan, J. Advice on Water Property Rights – A Report Prepared for the NSW Irrigators Council November 2000

- The licensing and approvals process (both new and renewing) needs to be clarified and tested.
- Change management – thus far, the regional adjustment issues have been largely ignored by the NSW Government. An assistance package is required to facilitate the transition based on PBT principles / processes.

4.2.5.2 Amendments to rollover provisions – options available

- Plan rollover provisions – At the time of the parliamentary debate on the Water Management Bill 2000, NSWIC considered proposing impact limits upon WSP rollover above which compensation would be triggered. This proposal was never tabled due to the significant differences of opinion that existed regarding what this limit should be, ranging from 2% (NSWIC) to 20% (NSW Treasury).
- Other options include:-
 - There should be an expectation of roll over of existing Bulk Access Regimes (BAR) into the next planning period, unless otherwise agreed by consensus of each valley's Water Management Committee.
 - Compulsory PBT process before any proposed changes occur. The PBT exercise must include details of commitment and process by which Government intends to address 'change management' issues – i.e. how the Government will address costs identified in the PBT. There must also be benchmarking information provided against which the WSP can be reviewed.
 - If the WSPs, at the mid-term review, are deemed to be meeting both the environmental, economic and social outcomes then they should be 'rolled' over for a further period of ten years.
- Licence rollover:-
 - There must be an expectation of full renewal / rollover, provided that pre-specified licence conditions are not breached.

4.2.5.3 Amendments to compensation provisions – options

- Decoupling compensation from WSPs and attaching to licences instead.
- Compensation in perpetuity.
- Include the provisions of the *Just Terms (Land Acquisition) Act 1991 (NSW)* for determining process, value and dispute resolution.
- Legislative requirement on the Minister to identify savings and/or market mechanisms before resorting to just terms acquisition.
- Strengthening words from right to 'claim' compensation to a 'right to' compensation.

- ❑ Strengthen the appeals process to cover the same scope that the Minister has discretion over i.e. time, manner and amount of compensation.

4.2.5.4 Amendments to licence and plan provisions

- ❑ Extend licence tenure to perpetuity or at least 25 years to increase irrigator security.
- ❑ Allow scope for flexible plan tenure from 5 to 15 years, at the discretion of the Water Management Committees and subject to compensation being linked the licence, to provide scope for adaptive management.

4.2.5.5 Water Management Committees

- ❑ Capacity building for committees
 - ❑ establishment and provision of prior knowledge requirements
 - ❑ training in processes
- ❑ Competent facilitation
 - ❑ capable independent Chair
 - ❑ inclusive non-threatening processes
 - ❑ complete, timely and appropriate information provision
 - ❑ consensus decision-making
- ❑ Membership - At least two members should be persons appointed to represent the interests of irrigators and these are to be approved by NSW Irrigators Council. Any increase of water management committee membership from 11 needs to maintain the same ratio of stakeholder representation as is specified in Schedule 10 1a) of The Act. Where practicable the representatives of each stakeholder group on Water Management Committees must reside within the valley.
- ❑ Decision-making powers (committee versus Minister) - where the committee has made a consensus decision, and the decision is in compliance with The Act, this cannot be over-ridden by the Minister.

4.2.5.6 Amendments to the trust provisions

- ❑ Amendments to current trust provisions in the Water Management Act 2000 are required to bring it back into line with the original "tripartite" proposal from NSWIC – an assured process and funding stream that can be used in future if required for environmental water needs, whilst preserving the security of water rights. This includes governance that reflects the funding partners.
- ❑ Irrigators have demonstrated a commitment to achieving additional environmental flows through joint investment programs, but this is

contingent upon protection of funds, agreed cost sharing arrangements and on continuing security over access rights. Amendments are required to ensure that irrigator's funds will only be levied after water users have signed off on expenditure proposals and cost sharing arrangements on a valley-by-valley basis.

Much has been written of water reform and indeed much has been done as a result of the COAG Agreement in 1994. However, if you asked the average irrigator what the process (and the rhetoric) has delivered in terms of asset security there is no doubt that their answer would not match the visionary view of the bureaucrats and the politicians.

If the much vaunted 'market' is to function then all the elements of that marketplace need to be effective and that means an efficient water access rights regime must be in place for all market participants (including the environment).

The challenge for industry and government is to engage in constructive dialogue to ensure that we end up with a legislative framework that allows for measurable environmental outcomes and a recognition of proper cost sharing arrangements to achieve those outcomes.

Recommendations

That the Commonwealth develop an agreed set of principles/characteristics for a water access (property) right (as outlined in this paper) and that this be incorporated, through an Inter Governmental Agreement, into the COAG process.

That the provision of comprehensive protection for any diminution of water property rights outside an agreed planning framework should be a minimum requirement under COAG water agreements.

That the Commonwealth Government actively engage the States and Territories, through the COAG process and on a cost-sharing basis, in the exploration of innovative approaches to finding additional environmental water. These investment solutions to be based, in order of priority, on:

- (iv). system savings – investment in system and on-farm savings and inefficiencies;***
- (v). voluntary buy-back or "market based" schemes;
or***
- (vi). "just terms" acquisition***

That the Commonwealth develop an "enforceable" cost/benefit framework ("Public Benefits Test") to be included as a minimum requirement under COAG water agreements and as a basis for investment decisions (system savings, market schemes and if

required "just terms" acquisition). Adherence to this framework to be strengthened through linkages to Commonwealth funding programs and National Competition Council assessment.

4.3 Water Trading

The concept of resource re-allocation from low value use to a higher value use as been a cornerstone principle of the COAG driven water reform process. There are concerns that trading is being viewed by many people (particularly those with an economic rationalist bent) as not only the "solution to all our problems" but also as a substitute (a poor one) for necessary structural adjustment processes.

This is a complex issue and one that requires careful and considered development.

Recommendations

Water trading must be conducted within appropriate social, physical and ecological constraints of catchments.

Any comprehensive interstate trading regime must be underpinned by a robust administrative system & trading rules that are developed in full consultation with market participants.

Provisions must be made for the legitimate participation of the "environment" in the water trading market (on the basis that if government intervention is required on behalf of the environment that this does not send artificial price signals to other market participants).

Governments must not be allowed to abrogate their responsibility for just terms acquisition (or compensation) by shifting the onus onto entitlement holders to make adjustments at their own expense in the commercial water market.

Governments should recognise that trading is not the only adjustment mechanism available to ensure efficient, high-value use of the available water resource.

Any national framework for water trading must recognise the sovereignty of collective schemes, and provide for each of the schemes to set trade rules that protect the rights of the majority of members of the collective.

There should be no legislative restrictions on trade but area specific trading rules should be established through a legitimate community-based planning and consultative framework.

4.4 Accountability for States

The manner and timing in which the States and Territories have so far undertaken the task of implementing the COAG reforms has varied considerably.

The States must be held accountable for their non-compliance with various aspects of the COAG Strategic Framework. In NSW for example, the State Government has failed to deliver fully in a number of key areas including:

- A robust property rights regime (water access rights) – a register and a ten year planning framework do not deliver what we believe was envisaged by ARMCANZ in its original deliberations and documentation.
- Institutional reform – separation of service provider, regulator and resource manager has not occurred in NSW
- An integrated approach to resource management (see Section 4.5)
- Public consultation and education

Recommendations

The National Competition Council must be provided with the necessary powers to ensure State compliance on water reform issues. This power must extend beyond the current tranche payment process.

In addition, the Commonwealth should report publicly on each State's compliance with COAG principles and any other agreed areas where Commonwealth funding for NRM issues is required (e.g. NAP).

4.5 Integrated Natural Resource Management

Currently, a landholder in NSW is subject to at least 85 legislative instruments, plans and policies of both the State and Commonwealth Governments. As summarised by the House of Representatives Standing Committee on Environment and Heritage Inquiry into Catchment Management,

The uncertain boundary between Commonwealth and State responsibilities has led to the present, disjointed, piecemeal, adhoc approach.⁶

with the Inquiry recommending that the issue of consolidating and integrating Commonwealth and State legislative responsibilities be examined.

The inquiry concluded that it was

"Accepted by all stakeholders that appropriate programs will be best delivered by regional institutions and communities"

⁶ Coordinating Catchment Management Report of the Inquiry into Catchment Management December 2000 p 54

Despite such a recommendation, and the signing of new funding agreements between the jurisdictions in the form of the National Action Plan for Salinity and Water Quality, conflicting regulatory instruments remain and communities remain on the fringes of natural resource decision making.

INRM however, is more than simply ensuring that the regulatory arrangements of the different legislatures in relation to environmental protection and resource use are clear and consistent. A paradigm shift is required to ensure the sustainability of our landscapes.

For too long, the focus of "integrated" natural resource management has been "how do we look at natural systems as a whole?" as opposed to looking at the management of water, native vegetation, ecosystem health, biodiversity and pest and weed species in separate silos.

The way we must be approaching this complex problem is integrating the needs and requirements of natural systems with human systems; our towns and cities, our communities, the needs and wants of individuals and human thought processes.

While recent expressions of Government go part way to recognising the importance of social and economic systems, the focus of the approach remains on how these systems impact on the natural resource base, and not how the social, economic and environmental systems interact.

Coordinating Catchment Management acknowledged that

Catchment management refers to the practice of managing natural resources using water catchment systems as the unit of management. As an approach to managing land and water resources, catchment management involves integrating ecological, economic and social aspects of natural resource management around an identified catchment system.⁸

However, the National Action Plan for Salinity and Water Quality for example states that:

Plans should be based upon analysis of natural resource problems and priorities carried out at the catchment/ region level by local communities assisted by governments in the context of wider regional objectives.⁹

And the Bilateral Agreement between NSW and the Commonwealth reverts to the old adage of focussing on the natural environment simply noting the:

Importance of natural resources being managed in an integrated manner and the need to establish direct linkages between resource specific plans and catchment blueprints. State legislation, policy and plan-making procedures will ensure that Catchment Blueprints, water sharing and water

⁷ Ibid p. 43

⁸ Coordinating Catchment Management Report of the Inquiry into Catchment Management December 2000 p 25

⁹ Council of Australian Governments "A National Action Plan for Salinity and Water Quality", November 2000, p. 4

*management plans and Regional Vegetation Management Plans are mutually supportive of the sustainable management of natural resources*¹⁰.

The required paradigm shift is starting to seep through in academic literature. There is growing acceptance that until the solutions for our natural resource issues are practical and acceptable to the broader community and to those that have to implement them; NRM will continue to be an expensive struggle.

Lal et.al., (2001) argue that the integration of disciplines and stakeholders operating at different spatial and temporal scales must be the basis of INRM, which should focus on

*"identifying management strategies for sustaining natural resource stocks and flows of goods and services as well as their underlying ecological processes" [and that] the key focus of INRM should not be the natural resource itself, but rather the interactions of humans with each other and with their natural environment, and the decisions they make about using and managing resources.*¹¹

For true INRM we must look at our landscapes as a whole, not rivers or native vegetation, natural ecosystems or the use of farmland alone. Integral to INRM is the equal consideration of social, economic and environmental issues in landscape planning. Natural resource decision-making must be combined with the planning for urban expansion, economic (business and industry) development, transport and agricultural production. Ultimately, INRM must aim to augment social, physical, human, natural and financial capital.

While strategic planning must be developed at the catchment scale in order to provide for a landscape approach, implementation and delivery must be at the local or property scale. To date, the distinct failure of our approach to NRM has been the inability to translate regional or statewide plans and policies into action on the local or farm scale. Yet clearly, as our experience with programs such as Landcare, it is at this scale that landholders have been most engaged and where the most progress has been made.

The basis of INRM must be:

- Aimed to meet the environmental, social, and economic goals of our community;
- A whole of governments initiative, linking resource agencies, planning and service delivery;
- The devolution of decision making, responsibility and accountability to the community at a catchment scale, with implementation at a local scale;

¹⁰ Agreement between the Commonwealth of Australia and State of New South Wales Relating to the National Action Plan for Salinity and Water Quality Initiative of the Council of Australian Governments, 17 May 2002 Section 4.22

¹¹ Lal, P., H. Lim-Applegate, and M. Scoccimarro. 2001. The adaptive decision-making process as a tool for integrated natural resource management: focus, attitudes, and approach. *Conservation Ecology* 5(2): 11

- Adaptive management for continuous improvement based on careful monitoring and revising of plans, strategies and actions
- The engagement of skilled partners from industry, non-government organisations and the private sector.

NSWIC proposes a model for INRM that melds planning and managing for natural resources with our social and economic institutions. The model, expressed diagrammatically in figure 1, accounts for the need for government to provide broad overarching public policy objectives to set a clear framework in which regions and communities can development their own plans and strategies, incorporating more detailed, issue specific plans to meet the requirements of their community. Fundamentally, the model is underpinned by secure access rights.

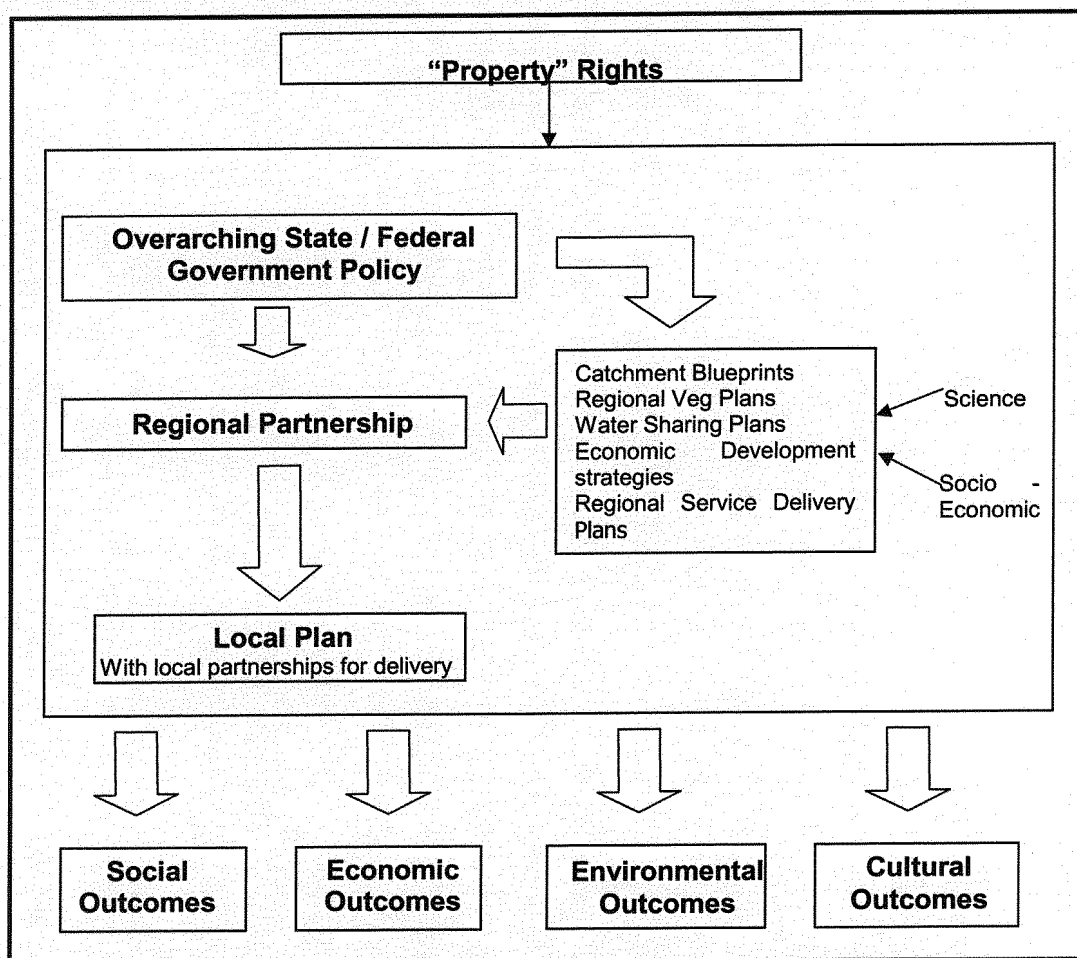


Figure 1: A model for integrated natural resource management.

Crucially, as part of this model, delivery is proposed at the local scale, at the farm gate with landholders in partnership with communities, industry bodies, government extension agencies, non-government organisations and the private sector.

The key role of State and Commonwealth Governments, in this framework is to:

- ❑ *provide overarching public policy objectives:* that ensure that communities have a clear (and understood) framework in which to work
- ❑ *provide public resources and an appropriate mechanisms for distributing funding:* to ensure the costs of managing our environments for the public benefit are shared efficiently and effectively
- ❑ *establishing the institutional arrangements to allow for community involvement:* By ensuring regional structures that are resourced and accountable to make the required decisions
- ❑ *continuing to resource research and development programs:* to enable continuous improvement of our natural, economic, and social systems by enhancing our knowledge of systems, and improving knowledge and technology.
- ❑ *monitoring:* to provide communities with the information they require for adaptive management.
- ❑ *accountability:* to ensure tax payers and the private sector remain confident of the value of their investments

Recommendations:

That the Commonwealth host a National Convention to debate the concept of Integrated Natural Resource Management, with the Convention to make recommendations to the Parliament for further Action

That the National Convention into Integrated Natural Resource Management be attended by organisations and individuals with broad ranging expertise in community and urban planning, natural resource management, economic and business development, social planning, and Local, State and Commonwealth Governments.

That the Commonwealth commit to introducing a system of Integrated Natural Resource Management, and develop a mechanism to ensure compliance by State and Local Governments.

4.5.1 Community Involvement – How should we do it?

The key to INRM is true engagement and involvement of the community. In recent times, Governments have been increasingly committed to consultation with stakeholders when making decisions about how land, water, vegetation and ecosystems should be managed. Typically, the consultation has been carried out by:

- Establishing organisations for the purpose (catchment management organisations, vegetation committees, river management committees, community reference panels)
- From time to time, holding workshops or public meetings on particular issues
- Less frequently, conducting surveys
- Having formal and informal discussions with stakeholders (eg industry and community peak bodies)

Far too often, the interactions are predominantly adversarial. We may be able to agree on broad principles, but we have been singularly unsuccessful in converting them into beneficial action.

A major problem is that the consultative organisations set up by the Government are not seen by landholders and the community as representative of them.

- The members are usually appointed or selectively chosen rather than democratically elected
- The membership is often completely out of proportion to general community demographics and of the desire to retain control in the case of Government members
- Once appointed, many members do not adequately communicate with and relay feedback from the people they are supposed to represent
- The organisations develop a life of their own, rather like a club, and seem to develop a culture that they "know what is best"

There are a number of impediments, including poor communication and science, an inadequacy to appropriately and fairly engage the community and that must be overcome to ensure true community involvement (and ownership) of integrated natural resource planning. These impediments, and ways in which to overcome them include:

- Adequate communication involving:
 - Providing all the required information to support the planning process before commencement of planning.
 - Government declaring those areas which are "non-negotiable", to ensure that committees don't waste a lot of time on matters over which they can have no influence.
 - Professional facilitation of planning negotiations by individuals empathetic to the difficulty of the task at hand.
 - The provision of sufficient time for all involved to think about, debate and make decisions on the issues.

- The provision of good science
 - the lack of good science and mistrust in the available science is a stumbling block in decision making, forcing the excessive reliance on the precautionary principle.
 - researchers have been put in a position where they tend to dramatise problems to secure their funding arrangements, with this alarmism picked up by politicians, bureaucrats and sections of the community
 - adequate, targeted resources for research and extension are required, and where research is funded by the Government, the highest standards of objectivity must be applied.
- The role of primary stakeholders, those who bear the direct impacts, and are expected to invest and take action must be acknowledged.
 - This could be addressed by reconstituting the membership of community advisory organisations to give primary stakeholders adequate representation, and assisting with development of their capacity to contribute.
 - Consideration must be given to having people who reside within the catchment.
- Adoption of best practice planning and consultation processes that are well resourced, including appropriate engagement with landholders, such as small group extension is essential

Recommendations

That the Commonwealth take a leadership role in implementing best practice community engagement and involvement in integrated natural resource management decision-making processes

That the Commonwealth include requirements to adopt best practice community engagement and involvement in decision making processes in all agreements of the Council of Australian Governments.

That the Commonwealth commit to ensuring that this best practice is both adopted and appropriately implemented by Commonwealth, State and Local Governments.

That the Commonwealth increase public investment in research and development into our understanding of natural systems, including the provision of long term research grants to appropriate tertiary institutions to ensure continuity of funding.

4.6 Achieving Environmental Outcomes

Professor Gary Jones from the CRC for Freshwater Ecology has argued correctly that for the ultimate acceptability of environmental flow options & outcomes it is up to the community and not a group of well-intentioned river scientists to make decisions. "The validity of the (risk assessment) framework should always be considered on a case by case basis using a combination of the best available scientific data and knowledge, and community experience and judgement"¹²

The Macquarie Marshes Agreement in NSW is a good example of demonstrated community & government cooperation that continues to deliver tangible and measurable environmental outcomes and sustainable regional communities.

Under the Agreement, the environment has been granted a general security allocation with an entitlement based on maintaining a long-term average flow to the Marshes each year. This environmental water allows the maintenance and improvement of natural reed beds, which are important wetland bird breeding sites. At the same time, graziers are also assisted, as the native pasture growth is also stimulated by the releases.

The water has been specifically reserved for the Marshes under a long-standing agreement between Government, environment groups, irrigators and graziers in the Marshes area.

The process is delivering a clear environmental outcome that at a local level has instilled a sense of pride and achievement amongst the community members and has allowed a focus on management rather than a debate about volume. Incidentally the improved management of the Macquarie Marshes has allowed Australia to deliver against its internal obligations under the Ramsar Agreement.

4.7 Incentive Schemes for water users

Article 11 of the United Nations Convention on Biodiversity.

The UN Convention on Biological Diversity recognises the importance of incentives in preserving biodiversity and commits signatory nations, as far as possible and appropriate to adopt economically and socially sound measures that act as incentives for the conservation of biodiversity¹³.

To date, Commonwealth programs have focussed on issues of land degradation and salinity, through programs such as the Natural Heritage Trust and the National Action Plan for Salinity and Water Quality.

Clearly, the Commonwealth, as a signatory of this agreement has a clear constitutional role in the continued delivery of incentives to landholders. Moreover, the House of

¹² Garry Jones, *Setting environmental flows to sustain a healthy working river*, Watershed February 2002, p.2

¹³ Article 11, United Nations Convention on Biodiversity

Representatives Standing Committee on Environment and Heritage concluded in its findings on the effect of Public Good Conservation on landholders that

... the level, type, availability and accessibility of incentive measures must be increased in order to motivate public good conservation activities.¹⁴

4.7.1 Types of Incentive Schemes

Despite long running programs such as the Natural Heritage Trust, in the main, many programs have fallen far short of expectations. Much has been written on the types of incentive schemes available to encourage the adoption of sustainable natural resource management, but to date, these have clearly focussed on land management practices. There is a clear need for programs to focus specifically on river health.

4.7.1.1 Voluntary, Community Assistance, Motivational and Educational Instruments

In the main, voluntary programs are the most established and have had the greatest support from landholders across Australia. These programs usually tend to be low cost, with no binding agreements for the landholder. Additionally, these programs tend to be organised and run at a very local level, often with administrative and strategic support from industry groups and Government.

Perhaps the most public example of such programs is Landcare. The Landcare movement made significant gains in engaging local communities and improving grass roots understanding of issues such as land and water degradation. Despite these gains, the Decade of Landcare has been, according to its founders Toyne and Farley, deficient in articulating its place in the bigger picture, and incorporate issues such as structural adjustment, market based systems, macroeconomic policy and economic incentives¹⁵.

Community and industry led incentive programs are pivotal in engaging individuals and achieving action at the property and catchment scale. Doak¹⁶ provides an overview of models for implementing best management practice, clearly identifying that industry driven models are beneficial in engaging individuals. These programs imbue growers with a sense of ownership and required modifications management actions have credibility and validity with landholders. Furthermore, as they rely on voluntary uptake, and industry funding, there is minimal, if any cost to government (and by inference the general public).

Doak however questions the capacity of the classic "self-regulatory" industry model of implementing best management practice (BMP) programs to adequately address sustainability and environmental issues. Doak argues that the reason for this is that industry (productivity) objectives are implemented as growers can identify a direct benefit, but that growers are reluctant to adopt actions to meet other objectives, such

¹⁴ House of Representatives Standing Committee on Environment and Heritage "Public Good Conservation: Our Challenge for the 21st Century" September 2001. p.140.

¹⁵ Toyne, P. and Farley, R. (2000) The Decade of Landcare, Looking Backward, Looking Forward The Australia Institute, Canberra

¹⁶ Doak, J. Implementation Pathways for Best Management Practice LWRRDC Occasional Paper No 10/98. Canberra, June 1998.

as those focussed on resource management, as they often have no observable economic benefit¹⁷. NSWIC questions this assumption, citing the example that more than 92% of cotton growers have implemented a spray and drift management plan under the cotton industry BMP, where clearly, the major benefit is ensuring the health and safety of growers and their families, employees and neighbours, and not economic returns¹⁸.

Community driven initiatives such as Land and Water Management Plans in the major irrigation areas of NSW are a great example of community and led, programs of environmental improvement. Land and Water Management Plans (LWMPs) are local integrated resource management strategies, prepared by landholders and local communities in a shared investment and knowledge partnership with the State and Federal Governments.

LWMPs focus on:

- Improved farm management and practices including irrigation management, water use efficiency, recycling and re-use and farm forestry;
- Improved regional management practices including drainage, recycling and storage and channel seepage control;
- Education programs, monitoring mechanisms and research and development;
- Protection and enhancement of natural resources and biodiversity

The 30-year plan focuses on three key areas; on-farm action, biodiversity action and regional action. MIA Envirowise encourages irrigators in the MIA to undertake programs such as Farmwise (including Water Wise) and Whole Farm Planning. On completion participants are then eligible to apply for funding to undertake on farm works such as implementing improved irrigation efficiency technologies, soil surveys, drainage and water recycling initiatives, and integrating biodiversity activities into the farming unit. In addition, there is also a structural adjustment package to assist landholders with major natural resource management issues as well as a discretionary funding program for community groups.

The level of commitment by the community is high as they see MIA EnviroWise as a program that will assist them to cope with change by accumulating knowledge within the community. This includes educating landholders and school children alike.

The level of investment from all sectors of the community is considerable. Landholders are contributing more than \$231 million dollars in both cash and in-kind, the Commonwealth and State Government's are injecting \$50.2 million dollars and local councils in the Murrumbidgee Irrigation Area are investing \$4 million dollars.

¹⁷ Doak, J. Implementation Pathways for Best Management Practice LWRDC Occasional Paper No 10/98. Canberra, June 1998, p. 13

¹⁸ Cotton Australia Website www.cottonaustralia.com.au/bmpindex.html 26/08/02

In the Coleambally Irrigation Area, more than \$130 million is being invested in land and water management plans, of which landholders are contributing 87% and the State and Commonwealth Governments 13%.

A key component of the LWMP is an extensive education and extension program. One module of this addresses net recharge rates, rising groundwater tables and resultant water logging and irrigation salinity problems. The net recharge rate module transfers the technology of CSIRO's "Swagman Farm Model" to on-farm decision-making processes such as cropping rotations, and water management. While the first phase of this module is understanding water table fluctuations and taking steps to manage it appropriately, further down the track it is envisaged that Coleambally Irrigation Cooperative Limited will actually enter into management agreements with their shareholders, with allowable on farm net recharge targets.

Industry driven initiatives such as Best Management Practice (BMP) or Accreditation programs are another example of voluntary initiatives. These programs tend to focus on improving environmental awareness, information sharing, and encouraging the adoption of new management techniques to improve production and minimise environmental impact. BMP tends to have a high degree of community acceptability, often because they are generated from the grass roots.

The Cotton Industry is a leader in developing industry best practice. The Cotton Best Management Practice (BMP) program has been established since 1997. The program aims to achieve true sustainability through improved farm efficiency and productivity, effective environmental protection and sustainable resource management by combining sound science with practical farm management. More than 25% of all cotton produced is from audited growers, with more than 50% of growers progressing through the program, 20% are "audit ready" and 18% have undertaken an initial compliance audit¹⁹. 92% of growers have developed a spray drift plan, a key component of the BMP program.

It is important to keep in mind, that the Cotton BMP program has been almost entirely funded by growers and industry bodies with close to \$10 million of investment collected directly through grower levies.

The Australian dairy industry has embarked on a program of improving the management of natural resources on dairy farms. "Sustaining Our Natural Resources – Dairying for Tomorrow", aims to address the key resource management issues of water use efficiency, effluent (and water quality) management, soil conservation, greenhouse emissions, biodiversity and native vegetation retention.

The Rice Environmental Flagship Program is an industry led program combining information collection and dissemination, motivational and educational programs

The program aims to aims to:

¹⁹ Cotton Australia, Annual Report 2001/02, Sydney. P. 6

- ❑ To collect a suite of essential biodiversity information (baseline and historical) for the rice growing area, in order to assess the level of change that has occurred and point to best opportunities for recovery and retention of biodiversity in the region.
- ❑ To utilise this baseline to build a formal biodiversity strategy and plan, aimed at recovery and retention of local biodiversity.
- ❑ To support and develop tools and systems for implementing the strategy.
- ❑ To facilitate farmers and industry to achieve change and repeat local and regional benefits.
- ❑ To demonstrate the benefits of integrating biodiversity conservation in farming and industry practices.

The Program focuses on three key areas:

- ❑ restoring the balance for biodiversity by collecting baseline information about biodiversity and developing a biodiversity strategy and plan aimed at retaining and recovering biodiversity in the region.
- ❑ healthy rivers and landscapes with a goal to improve the health of the landscape and river systems that are influenced by rice growing, including water table height, soil salinity, and irrigation and river water quality.
 - ❑ Depth to watertable.
 - ❑ Soil Salinity.
 - ❑ Irrigation and river water quality.
- ❑ Greenhouse through identifying and reducing significant emission points in growing and processing rice while improving output, and develop innovative greenhouse gas solutions.
- ❑ Auditing and compliance

Distinctively, the Rice Environmental Flagship Program is based on industry collaboration with Government agencies at all levels, research institutions (including universities and Commonwealth Research Centres), non-government organisations and the private sector.

Clearly, the initiatives of the irrigation areas, and the cotton and rice industries have moved beyond Doak's broad-brush assessment of BMP implementation. Growers acknowledge that sustainability is more than just economic sustainability, and that appropriate land and water management strategies are essential to long term viability and environmental health.

Furthermore, industry bodies are seeking collaborators from within Government, non-government organisations, tertiary institutions and the private sector. These

partnership initiatives, both in terms of funding arrangements and the provision of expertise are aimed to refine and improve natural resource management modules and to further encourage their uptake by growers while sharing the cost of implementing public good environmental outcomes.

4.7.1.2 Property and market-based Instruments

The clarification of property (access) rights provides the basis for engaging licence holders to participate in market-based instruments aimed at achieving environmental improvement. It provides licence holders with the security required to enable them to participate freely in new initiatives.

The use of market – based instruments to achieve environmental outcomes is becoming a reality in both NSW and across the country. Trials of offset schemes, environmental services markets, trading regimes and revolving funds are well on the way, and a number of programs are well and truly established, such as the Trust for Nature in Victoria.

Management Agreements with Stewardship payments

The concept of a management agreement, struck between a landholder and a funding body (for example Government) is long established. In NSW for example, the Native Vegetation Management Fund provides landholders with payments (both one off and ongoing) to conserve remnants of native vegetation under an agreed plan of management. Similarly, the National Parks and Wildlife Service's Voluntary Conservation Agreement programs are but two where landholders enter into management agreements accompanied by payments from Government funds.

Parallels can be drawn to the NSW Waterwise on the Farm Water Use Efficiency Program, where by landholders are can receive part funding to draw up Integrated Drainage Management Plans and invest in capital to implement the plans.

Licensing and Trading (see discussion in 4.3)

The trading of licences or permits is seen as a mechanism to encourage the highest value use of a resource. Trading regimes have been implemented to manage the discharge of pollutants (such as the Load Based Licencing and the Hunter River Salinity Trading Scheme operated by the NSW Environmental Protection Authority) .

The trading water has been seen as the primary mechanism to move water to the highest value use and to drive efficient water use.

ARMCANZ identified a series of advantages for introducing water trading regimes, including:

- *allows water to move from low value to high value users and thereby encourages productive use of the resource, contributes to regional development and can free up water for environmental purposes;*
- *provides a re-allocation mechanism for water use in areas where water is in high demand (and avoids arbitrary administrative decision making);*

- *encourages sustainable development limits to be set;*
- *encourages issues of sleeper licences to be addressed when setting up a market;*
- *encourages related resource management issues to be addressed (e.g. land management practices often need to be addressed as part of setting environmental water provisions and sustainable limits);*
- *generates need for clearer reporting of water use, as a means substantiating and justifying a continuing water "right"; and*
- *attracts a high level of community support for trading in areas where demand for water is high²⁰.*

Covenants and Revolving Funds

Covenanting programs, focussed particularly on land have been in operation across Australia for a number of years. The concept of a revolving fund provides a market mechanism to secure the use of property, purely for conservation in perpetuity.

A revolving fund operates by purchasing property with conservation values, placing a perpetual covenant over the title of the property, on-selling to a conservation sympathetic new owner, with the proceeds of sale returning to the fund for a future purchase.

The Trust for Nature in Victoria, enabled by legislation passed by the Victorian parliament in 1972 has been operating a revolving fund successfully since 1989 years, purchasing more than 20 properties and placing them under covenants to ensure that the ecological values are to be protected into the future. Similar funds operate internationally, those established by the US Nature Conservancy and the UK Royal Society for the Protection of Birds. The NSW Nature Conservation Trust has the capacity to operate an identical scheme in NSW. The NSW Nature Conservation Trust is an initiative of conservation indigenous and farming organisations. Established by legislation, the Trust is governed by an independent board and operates at arms length to Government. Initial funding for the start-up of the Trust was received from the State Government, with additional funding from the State and Commonwealth Governments to establish the revolving fund.

The Trust has funding to establish a revolving fund (see above), and the capacity to attract private sector funding, receive donations and gifts of property and enter into a range of agreements with landholders. It is not the intention that the Trust receive on-going funding from either the State or Commonwealth Governments.

²⁰ ARMCANZ, *Water Trading and Entitlements Resolution Number 5, meeting 14. 20 November 1998*

Although still in its fledgling stages, the Nature Conservation Trust is empowered by its enabling legislation to:

- establish and maintain other fund as appropriate to its activities
- raise monies from organisations and the general public

The Trust has the capacity to develop a set of conservation priorities as part of its business planning process. These priorities must be consistent with those of Government, reinforced by a requirement for the Minister for the Environment, in consultation with the Minister for Land and Water Conservation to endorse the Business Plan.

A great deal of flexibility is provided to the Trust under the enabling legislation. NSWIC feels that there is scope for implementing a number of the partnership initiatives outlined through the Nature Conservation Trust. A fundamental requirement must be that funds can be "tagged" specifically for delivering against the partnership agreement.

Further exploration needs to be undertaken to determine whether or not the Trust has the scope for example to establish a mechanism to raise levies from irrigators, or invest in infrastructure to achieve system savings. Certainly, the Trust is able to receive funds and spend them accordingly on agreed conservation priorities. One mechanism to address this limitation may be for another body, with an existing capacity to generate a levy (such as the NSW Irrigators' Council Trust) with Alternatively, amendment may be required to enable the collection of a levy. funding, with other groups, including NSW Irrigators' Council Trust with the capacity to raise levies.

Additionally, the Board of the NSW Nature Conservation Trust has already been established. As riverine environments were not the focus of the establishment of the Trust, and the selection criteria for board members, it may be that the Trust lacks expertise in this field. In order for government, irrigators and outside investors to have confidence in delivering the charter of the partnership an separate committee would have to be established to provide expert advice to the board on these issues.

Such a concept is easily applied to water. The separation of land and water title under the Water Management Act would enable the Trust to purchase of water licences, place conditions over the use of the licence and then on-sell to willing buyers.

Auctions

Auctions of "environmental services" are currently being trialed on the NSW Liverpool Plains, and by the Victorian Government through a new initiative, the BushTender Program.

In both these schemes, landholders enter a competitive bidding process to provide "environmental services" to the community. The "community" through government establish priorities by developing scales of relative preferences (similar to the Environmental Benefits Index of the US Conservation Reserve Program). Landholders enter a "bid" of what activities are they are prepared to undertake for a particular cost

and successful bidders enter into management agreements and receive payment for delivering the conservation outcomes.

The Conservation Reserve Program (CRP) in the United States has been running for The BushTender program has to date focussed on improving biodiversity through the retention of bushland.

Identical mechanisms apply to riverine environments and water, and there is certainly scope to include these benefits in expanded programs. For example, a water licence holder could bid all or part of an annual allocation to contribute to environmental flows.

The toolbox of property and market based mechanisms to encourage the sustainable use of water already exists. In some cases, they are already operational (eg water trading), or require modification to meet the needs of irrigators and the community and improve participation (eg Waterwise on the Farm).

In others concept operates or is being trailed in relation to land management activities (such as auctions and covenants) and can simply be translated or expanded to include consideration of water conservation.

It must be remembered that regardless of how efficient growers are on farm, major efficiency gains are still to be made in the Government owned and operated water delivery systems. All levels of Government must vigorously pursue mechanisms to drive efficiencies in supply, including the separation of regulatory and water delivery roles currently held by single agencies and the introduction of competition.

Recommendations

That the Commonwealth continue to acknowledge and support the role of industry driven voluntary incentive programs, such as BMP, in achieving changes in the way landholders manage natural resources on their farms.

That the Commonwealth Government continue to support initiatives of industry in dealing with natural resource management issues.

That the Commonwealth commit to exploring a range of mechanisms to encourage efficient and sustainable on farm water use.

That the Commonwealth pursue opportunities either through the expansion of existing programs or the introduction of new programs to provide incentives to irrigators to improve sustainable water usage.

5 The effect of Commonwealth policies and programs on current and future water use in rural Australia

5.1 Council of Australian Governments/National Competition Policy

The 1994 COAG Communique stated that:

..the changes flowing from the (water reform) framework are extensive and far reaching in their implications.....the speed and extent of water industry reform and the adjustment process will be dependent on the availability of financial resources to facilitate structural adjustment and asset refurbishment²¹

In 1995 COAG emphasised that the National Competition Policy (NCP) Agreement would:

..... enhance the national economic interest by improving Australia's international competitiveness as well as enhancing the interests of Australian consumers.²²

NSWIC believes that a number of key elements of the Agreement(s) on water reform have either not been implemented or there has been an inconsistent interpretation and application of these elements across the States.

The following have not been delivered or their implementation has been inconsistent:

- secure property right in water entitlements (refer Section 4.2 of this submission)
- adequate financial resources to facilitate structural adjustment (the Namoi groundwater issue is a case in point but there will be others in NSW such as the Lower Macquarie)
- greater efficiency in service delivery & institutional reform
- that water be used to maximise its contribution to national income & welfare
- balancing environmental water needs with other water users

²¹ Council of Australian Governments (COAG) Communique 25 February 1994. p4

²² Council of Australian Governments (COAG) Communique 11 April 1995, p1

5.2 National Action Plan for Salinity and Water Quality

NSWIC is fully supportive of the concept and principles underpinning the NAP but remains extremely concerned that it will not deliver the on-ground funding.

Recommendations

The focus of the NAP must be on sustainability at an 'on-ground' level – starting at the property level and progressing in a co-ordinated and integrated manner through the sub-catchment, catchment and Basin levels

6 Commonwealth policies and programs that could address and balance the competing demands for water resources

6.1 Murray Environmental Flows – “The Living Murray”

The review of the health of the Murray is an important issue and one that all stakeholders must be involved in not only to ensure the sustainability of the river but the long-term future of the irrigation industry and the many dependent regional towns and communities.

The “Living Murray” is a significant and important exercise and unless all stakeholders work together, it is unlikely that we will reach an equitable and sustainable outcome.

The biggest challenge will be balancing the agreed environmental outcomes against the socio-economic impacts particularly when you consider that the Basin directly supports 2 million people with an annual output of some \$23 billion of which \$10 billion is directly from agriculture.

NSWIC is concerned that both State and Federal Governments have not committed to put dollars on the table to fund any agreed environmental outcomes. In NSW, for example the Commonwealth and State Governments have walked away from the issue of compensation, particularly for the claw-back of over-allocated groundwater resources.

If governments are not prepared to commit significant resources to the Murray e-flows process and set realistic timeframes, then a community consultation process is a token exercise.

NSWIC's position is quite clear:

1. we support the need for healthy working river systems and clearly defined and agreed environmental outcomes that are supported by sound science that has been subjected to a peer review
2. the irrigation community must be allowed to participate in the development, evaluation and agreement of preferred options

3. the process must include a detailed review of the benefits of the existing CAP and environmental flow rules
4. once we have determined the key environmental outcomes then we must determine what we need to do to achieve these outcomes and how much water is required and clearly identify the costs and benefits of providing this water.

Given that additional water down the system is not the only option when it comes to achieving good environmental outcomes then we must look at:

1. Making better use of water currently available to the environment;
2. Fixing the inefficiencies in the system and innovative approaches to saving water; and
3. The bottom line is that IF the only way to achieve the environmental targets is to withdraw water from irrigators then that withdrawal must be on the basis of full compensation for erosion of those water rights.

This is a major opportunity to ensure that we put in place a better management regime but we must focus on getting the greatest benefit with the least impact on irrigators.

The next stage of the process is the discussion about the future of the Murray and already we have not learnt from past mistakes and are rapidly moving down the well-trodden path of angst, frustration and mistrust.

7 Conclusion

Irrigators recognise the need for change and that we are no longer in a development phase. We also recognise that in a management phase we must deliver against the principles of a healthy working river and the need for sustainable water resources.

Governments must deal with the fundamental principles of water access rights, community ownership and deliver an integrated policy development and management framework if we are serious about the long-term sustainability of the environment, our industries and our regional communities.

There must be a cooperative rather than a confrontational approach to these difficult natural resource management issues.

These reforms involve a major change management process and that is appropriate provided that the equity issues are addressed in a sensitive and inclusive way. It must be remembered that environmental improvement is not measured by the size of the impact on irrigators.