



**NSW
IRRIGATORS'
COUNCIL**

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Submission to the

**Natural Resource Management
(Legislative Assembly Committee)**

**Inquiry into Natural Resource
Management Issues**

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Introduction

NSW Irrigators' Council (NSWIC) is the peak body representing approximately 10,000 irrigation farmers in NSW. Our members include valley water user associations, food and fibre groups, irrigation corporations and commodity groups from the rice, cotton, dairy and horticultural industries.

NSWIC welcomes this opportunity to contribute to the NSW Natural Resource Management (Legislative Assembly) Committee's current inquiry into sustainable natural resource management.

NSWIC supports 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.

NSWIC encourages the Natural Resource Management (Legislative Assembly) Committee to investigate the progress of a number of other inquiries addressing quite similar issues. These inquiries include:

- Federal House of Representatives Standing Committee on Agriculture, Fisheries and Forestry Inquiry into Future Water Supplies for Australia's Rural Industries & Communities
- Federal Senate Rural and Regional Affairs and Transport References Committee inquiry into future water supplies
- Productivity Commission's public inquiry into the impact of Native Vegetation and Biodiversity regulations



TOR A

Current disincentives that exist for ecologically sustainable land and water use in New South Wales;

Water Access Rights

Current water management arrangements in NSW do not actively encourage irrigators (and their financiers) to invest in improved irrigation management systems.

Traditionally most of the value in irrigation land has been associated with the value of the water (and by default its productive use). The ten year tenure of water sharing plans in NSW is not sufficient to allow confidence in long-term capital investment or investment in environmental improvement.

By way of example, upgrading and reconfiguring infrastructure from flood to precision (drip) irrigation on a horticultural farm in the Lower Murray Valley might cost in the order of \$8000 per hectare. Such an upgrade could have multiple benefits, including increased water use efficiency (and as such less accession to the water table) and improved production and quality levels.

Another example might be an irrigation farm business, wishing to invest in a value-adding enterprise, being dissuaded from investing when confronted with complete uncertainty about the value of that asset at the conclusion of the period. Most rural loans related to expenditure of a capital nature extend for at least twenty years, yet only 10 years of security is provided.

Before and after each ten year planning period complete uncertainty exists regarding the value of water rights. Changes can, and will be, made between planning periods without compensation, as recently witnessed in negotiations prior to the gazettal of the first WSPs.

Investors are thus faced with a “depreciating” security, with the major uncertainty being the extent of depreciation that can be expected over the life of a WSP. Restriction and/or withdrawal of capital investment could be expected as the WSPs move closer to maturity. Access to finance will inevitably be affected.

Apart from implications for security there will be implications from the depreciating value of licences on the permanent trade market. One could assume that there would be devaluation in the market price of permanent transfers towards the end of the ten year planning period. This is contrary to both the original intent of COAG and the current political push to encourage trading, placing NSW irrigators at a competitive disadvantage in any interstate marketplace.

In addition to the tenure of the water sharing plans, there are a number of sections of the Water Management Act and the Water Sharing Plans that give government the



power to further attenuate an irrigator's access to water, without compensation. For example, in groundwater systems, annual allocation announcements and hotspot management could significantly restrict a licence holder's access to water, without compensation. These clauses are not robust, and in the absence of the necessary rules, much is left to ministerial discretion.

The provisions for compensation in the Water Management Act are weak, and untested in law. Compensation for eroded access within the period of the water-sharing plan is not guaranteed and is only claimable. The Minister has discretion over the amount, manner and timing of compensation and the right of appeal is weaker, being specific to the amount or timing of compensation. Furthermore, it is not certain that there is a right of appeal to a zero compensation payment – under the right to appeal the amount offered.

The adequacy with which the legislation deals with supplementary water access is questionable. Supplementary water is an integral component of the access right for some water users. Whilst it is generally agreed that its status is not equivalent to that of licensed entitlement, water users do not have the right to claim compensation for reductions in access to supplementary water, despite the significant economic impact it might have on their business.

Taxation

There are currently major taxation disincentives to undertake Landcare and environmental improvement activities at a regional level.

At present accelerated depreciation allowances are available to primary producers (individuals and companies) for investment in environmental improvement, such as water efficiency and savings. However, this does not extend to water suppliers, or other bodies (eg Landcare groups) operating at a regional scale. This acts as a disincentive to larger scale investment in environmental improvement, water efficiency and savings.

Catchment Management Planning and Programs

Resource management planning in NSW over the past five years has been characterised by controversy and frustration and has, in many cases, generated mistrust and ill feeling towards Government. There are a number of reasons for this:

- The community's expectation about their role in planning processes differed significantly from the role implemented by Government. The community had an expectation of ownership and responsibility, which was, in many cases, encouraged by government over a number of years and not delivered.



- Inter-agency reviews of draft plans prior to Ministerial signoff often resulted in significant changes to the committee consensus plans.
- There is no clarity of the relationship between different resource and environmental management statutes. This has created uncertainty and frustration for all stakeholders (including Government Agencies).

The key theme in each of the issues identified above is that the role of Government(s) in the past has been one of imposition and a “top down” approach. Governments have traditionally preferred the regulatory approach to natural resource management but the reality is that modern communities are now much better informed and much more willing to engage in the policy debate. The top down approach has done little to encourage the adoption of better management practices, or improve the uptake of Government programs.

The inability to properly translate state and catchment targets into meaningful measures for on the ground action is a major impediment to planned and coordinated environmental improvement.



TOR B

Options for the removal of such disincentives and any consequences in doing so;

Water Access Rights

Much can be done to improve the strength of water access rights in NSW. Some of this requires legislative amendment, while other components can be achieved by working cooperatively with other States and the Commonwealth through the Council of Australian Governments and the Murray-Darling Basin Ministerial Council.

Water Access Rights should:

- ❑ Be issued in perpetuity
- ❑ Be expressed as a fixed share of the available resource
- ❑ Trigger just terms compensation if in anyway diminished
- ❑ Be treated in the same manner as real property (including the ability to be used as collateral)
- ❑ Have the ability to be transferred, with the rights to transfer (including market rules) clearly defined

Other steps, such as requiring governments and communities to explore innovative solutions to resource management issues before further impinging on the water access rights of licence holders and undertaking detailed public benefits assessment before any decision is made provides strength and transparency to Government decision making processes.

The following section outlines in detail a way forward in improving irrigators security of access to water.

Principles of Water Access Rights

NSWIC asserts that there are five key principles required to 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.

The theory of 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

Water Access Rights in Practice

In practical terms, NSWIC takes the view that an access 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 theoretically described with

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



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**

Perpetual water access 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.**

Just terms acquisition, whilst fundamental to a water access 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, where the title is guaranteed by Government.

❑ 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 access 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 access right. In the context of water access rights, this characteristic could also be referred to as tradability.

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

Taxation

There is a clear need for the Australian Taxation Commissioner to revisit rulings relating to investment in infrastructure upgrades and regional environmental programs. Any necessary legislative change should be implemented as soon as possible.

Catchment Management and Planning

Discussion on industry programs provided in TOR C, provide a way forward on improving the linkages between state and catchment wide targets and meaningful on the ground actions for farmers.

Recent announcements by the NSW Government provide an opportunity for a rethink in the way we deal with integrated catchment management. NSWIC proposes a new model for making catchment management decisions. This model (shown diagrammatically in figure 1) is focussed on a Catchment Authority, working in cooperation with Government, the community and the Natural Resources Commissioner. To avoid the mistakes of the past, it is important that the roles and responsibilities of all parties are clearly defined, to ensure consistency of expectation.

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



This model is consistent with the framework put forward by the Wentworth Group in their report to Premier Carr, "A New Model for Landscape Conservation in NSW". The Wentworth Group propose that a community based, catchment scale institution develop plans that identify the responsibility (unfunded) outcomes required from landholders and those activities that deliver public good outcomes and require public investment. NSWIC views the Wentworth Group's "property planning" concept as being one type of suitable "Outcome Partner" agreement with the Catchment Authority.

Importantly, this Catchment Authority model has applicability beyond natural resource planning and management. Planning for urban development, transport, waste management and regional growth could be incorporated into the model.



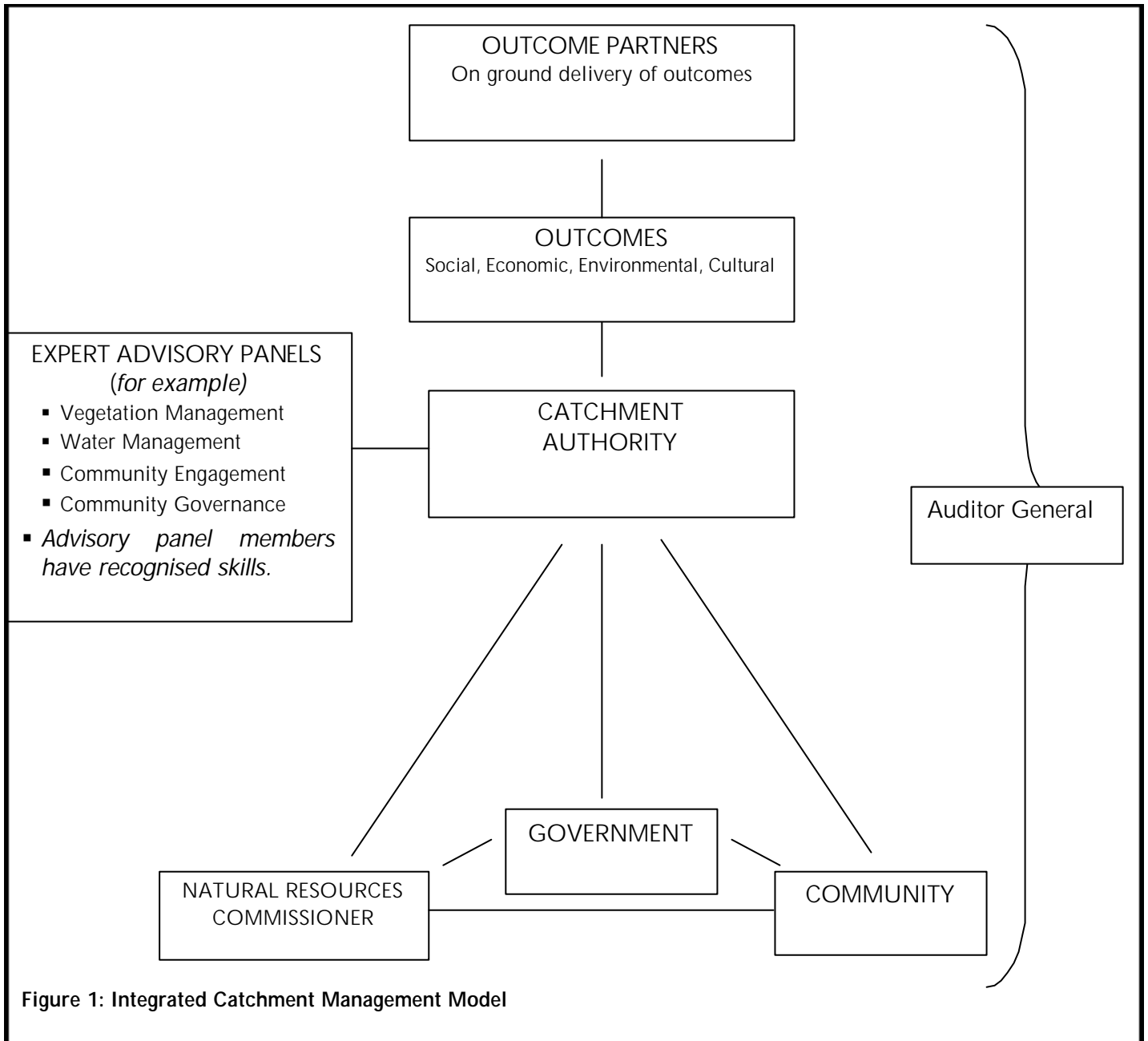


Figure 1: Integrated Catchment Management Model

Catchment Authority

The role of the Catchment Authority is to develop and deliver, in conjunction with the catchment community and the Government, integrated catchment management. The Authority would develop catchment based targets and strategies (within the State Policy Frameworks), that are agreed to by the Minister for Natural Resources. Implementation of these strategies would be achieved through an environmental management program that is adaptable, accountable, equitable and focussed on continuous environmental improvement. Catchment Authorities would receive and control funding (eg. NHT, NAP, State Government, non-government) in order implement the management program.



The key outputs of the Catchment Authority are:

- Catchment based targets
- Strategies for implementing these targets, including identification of which targets are “public good” and require cost sharing arrangements and which targets are the “responsibility” of catchment community members
- Agreements with Outcome Partners to deliver outcomes on the ground, including financial contracts to deliver public money for those targets identified as “public good”. Examples of outcome partners could be individual farmers, community groups, research institutions, non-government organisations, or companies
- An audited and accountable investment program, through integrated catchment business plans

Membership of the Catchment Authority is based on skills, experience, and expertise.

Areas of skill and expertise should include:

- Integrated Catchment Management
- Local industry, including agriculture and irrigation
- Local Government
- Local catchment system knowledge from both industry and environmental perspectives
- Indigenous cultural heritage management
- Corporate Governance
- Skills that might be pertinent to a particular catchment community, identified through the community participation process.

Members must be part of the catchment community, and not representative of State or Commonwealth Government. The Authority is to be headed by an independent chairperson with expertise in facilitating consensus decision-making.

The Catchment Authority can establish expert advisory panels to draw on the expertise of scientists, community participation and socio-economic specialists, and those with experience and skills in land management, cultural heritage management, and river management. Government has a role in providing whole of government advice through such an advisory panel. An example of such a panel might be the Environmental Flows Reference Group that has recently been established in the Macquarie Valley.

Natural Resources Commissioner



NSWIC supports the appointment of an Independent Natural Resources Commissioner, operating in a similar manner to IPART or the Productivity Commission. The role of the Natural Resources Commission could include:

1. Holding independent inquiries on matters of public importance, such as State Policy Frameworks.
2. Providing recommendation to Government for the development or refinement of state-wide policy frameworks, within which Catchment Authorities have to operate.
3. Providing services to Catchment Authorities to build the capacity of members.
4. Acting as mediator in resolving differences within the Catchment Authorities, and between the Catchment Authority and the Minister.
5. Providing advice to Government for required legislative, agency and policy reform and research priorities to ensure that Government is best assisting Catchment Authorities and the community to achieve on-ground outcomes.

The first task of the Natural Resources Commissioner, in co-operation with the community, must be to undertake an Initial Audit of existing plans and targets and to assess the skills and expertise of existing community members on the various committees and boards. NSWIC views community participation as central to the success of the activities of the Natural Resources Commissioner.

There should be two phases to Initial Audit. Phase one is an audit of:

1. The existing structure and function of resource committees and boards.
2. An assessment of the consistency of targets and strategies in existing plans, within a catchment as well as State Policy Frameworks.
3. The skills and expertise of existing members of committees and boards.

Phase two is an audit of the how existing arrangements benchmark against the catchment community's requirements and expectations of integrated catchment management. Phase two will involve a catchment based community participation process to:

1. Endorse, refine or reset State Policy Frameworks and integrated catchment management targets and outcomes and the vehicles for delivering these outcomes.
2. Refine the makeup (in terms of skills and expertise required for each catchment) of the Catchment Authority and establish processes for ongoing community participation in decision-making.



Government

The Minister for Natural Resources has responsibilities to the Parliament and people of NSW to ensure the delivery of integrated catchment management, and must retain the capacity to exercise this responsibility.

The Minister has responsibility to ensure that catchment targets and strategies are consistent with State Policy Frameworks, by signing off on Catchment Plans and integrated catchment business plans. Before accepting the plan, the Minister for Natural Resources must consult with the Minister for the Environment, who may make recommendations, though these recommendations do not necessarily have to be accepted by the Minister for Natural Resources.

The Minister's role here must be clearly defined. Where the plans are consistent, they must be adopted, and where inconsistency exists, the Minister must work with the Catchment Authority to resolve differences. The Natural Resources Commissioner can assist in this process, acting as a mediator.

Community engagement and participation

Past approaches by government(s) to discussing natural resource management issues with stakeholders and the broader community have been less than ideal. In many cases these "consultative" processes have been based solely around the provision of information and tokenistic consultation. This approach has caused angst, broken down the potential for constructive and cooperative solutions and undermined local ownership and trust. Expectations of the community's role were created and then, in many cases, not delivered against.

The OECD⁶ has developed a set of guiding principles to assist member countries to strengthen their engagement processes with citizens. These principles are:

- Information must be complete, objective, reliable, relevant, easy to find and understand
- Consultation has clear goals and rules defining the limits of the exercise and government's obligation to account for feedback and input
- Participation provides sufficient time and flexibility to allow for the emergence of new ideas and proposals from the community, as well as mechanisms for their integration into government policy-making processes

⁶ OECD Handbook *Citizens as partners: Information, consultation and Public Perception in Policy-making*, OECD, 2001, p.13.



Much can be done to improve community participation in natural resource decision-making. For example, Government and Catchment Authorities can:

- Establish a clear framework for community involvement, to avoid the recent situation where expectations were not realised. This framework must set clear goals and rules defining the responsibilities and obligations of the community and government, and mechanisms for government to account for community feedback and input
- Adequately resource and support community members' involvement in consultation, particularly those involved in committees which require a significant time commitment
- Provide timely, complete, objective, reliable, relevant and easy to find and understand information
- Allow the community sufficient time and flexibility to allow for the emergence of new ideas and proposals, and mechanisms to integrate these ideas into government policy-making processes.
- Work with the community to ensure consistency with the clearly established legal and policy frameworks.
- Undertake planning according to an appropriate timeframe, eg, high level, strategic planning such as State Policy Frameworks should be completed before catchment level planning is undertaken
- Implement an independent and public process of evaluating the success or failure of community engagement programs and taking the necessary action to address shortfalls

Auditor General

NSWIC sees an independent auditor, such as the Auditor General, playing an extremely important role in ensuring efficient, transparent and accountable catchment management. Independent of Government and the Natural Resources Commissioner, the Auditor General could:

1. Annually audit Catchment Authorities Integrated Catchment Business Plans
2. Report annually to the Parliament on:
 - a. Progress of the Catchment Authorities in working towards their identified targets and the implementation of strategies, including public engagement strategies
 - b. Progress of the Catchment Authorities in working towards meeting NSW's State Policy Frameworks and interstate, national and international obligations



- c. The performance of the Minister in working with the Catchment Authority to ensure the consistency of catchment targets and strategies with established State Policy Frameworks
- d. The distribution of funds received from State and Commonwealth Governments and expenditure of these funds to ensure clear public accountability as how funds are delivering on-ground catchment outcomes.



TOR C
**Approaches to land use management on farms which
both reduce salinity and mitigate the effects of
drought;**

In response to this TOR, the following section discusses existing community and industry programs that provide a coordinated approach to land management, both on-farm and regionally.

Land and Water Management Plans

Land and Water Management Plans (LWMPs) in the major irrigation areas and districts are a great example of communities developing and implementing programs to address issues such as salinity, water use efficiency and biodiversity. These programs are jointly funded, by the State and Commonwealth Governments, irrigators, and local communities (through local government).

There are six plans in total, Berriquin, Cadell, Denimein and Wakool in the Murray Valley and one each in the Murrumbidgee and Coleambally Irrigation Areas. The plans have the same basis, but each has its own specific priorities, targets and actions.

Generically, 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



A Working Example : MIA EnviroWise

In 1989, the community of the Murrumbidgee Irrigation Area and Districts initiated and began developing a Land and Water Management Plan, to respond to threats to the future sustainability of the area. After nine years of information gathering, drafting and community consultation and involvement, the final draft plan was presented to Government for negotiation of a cost sharing agreement. The implementation phase of the plan is now known as MIA EnviroWise.

MIA Envirowise aims to deal with issues such as

- ❑ The effects of excess drainage and flooding
- ❑ The effects of water logging and land salinity on agriculture
- ❑ The effects of high water tables and salinity on road maintenance
- ❑ Effects of deteriorating water supply systems
- ❑ Natural resources and biodiversity management
- ❑ Water quality management
- ❑ Adjustments to income and general business due to environmental impacts
- ❑ Reductions in asset values

In addition, MIA EnviroWise is part of Murrumbidgee Irrigation's statutory obligations to Government in holding licences issued by the Department of Infrastructure, Planning and Natural Resources, and the Environment Protection Authority.

The main objectives of MIA Envirowise are:

- ❑ To maintain or increase productivity
- ❑ To reduce seepage to groundwater (directly linked to controlling soil salinity)
- ❑ To keep drainage water quality at agreed standards
- ❑ To reduce surface drainage volumes
- ❑ Protect our natural resources
- ❑ Minimise or prevent downstream effects.

"On-farm" targeted actions of MIA EnviroWise include:

- ❑ Whole farm planning (FarmWise education program)
- ❑ Soil surveys
- ❑ Irrigation efficiency systems
- ❑ Drainage recycling systems
- ❑ Sub-surface drainage and disposal
- ❑ On-farm seepage control
- ❑ Native vegetation planting and other biodiversity activities

Incentives are available for many of the on-farm actions, and access to such funding is contingent on participation in FarmWise education program and the development of a whole farm plan. In 2002-03, incentives paid to farmers totalled, \$1,440,068, with a total value of works undertaken valued at \$7,984,973.

MIA EnviroWise is a 30-year program, costing \$285.4 million to implement over that period. Irrigators are contributing 81% as a cash levy and through in kind works. Governments are being asked to contribute 18% and the urban community of the MIA and Districts, 1%.

For more information see: www.mia-envirowise.com



Industry Programs

Irrigated agricultural industries have been at the forefront in developing and implementing best management practice programs for growers. These programs establish a balance between the economic, social and environmental goals of growers, their customers and the broader community.

A Working Example : Cotton Industry Best Management Practice (BMP)

The Cotton industry BMP is a great example of industry led adoption of better farming practice. BMP is a voluntary program that encourages cotton growers to assess risks on farm and implement plans to overcome environmental and other issues.

BMP is a risk assessment program based on a process of continuous improvement. It uses a 'plan-do-check-review' management cycle and contains an external audit component.

Best Management Practices helps cotton growers:

- Identify and manage risks
- Create a safe workplace for staff
- Design cotton farms that minimise environmental impact
- Use pesticides in a safe and responsible manner
- Use all available options to control pests
- Minimise usage and recycle water
- Store and handle chemicals safely

BMP has had quite rapid adoption by growers, with almost 60% of the 2002 Cotton crop produced under best management practice. More than 40 BMP area groups have been established in the cotton valleys to tackle on- farm management issues. The table below details the uptake of BMP across the cotton growing regions of NSW.

Valley	BMP Progressing (% Growers)	BMP Audited (% Growers)
Gwydir, NSW	57	33
Walgett, NSW	58	12
Lower Namoi, NSW	50	21
Upper Namoi, NSW	27	12
Bourke, NSW	58	42
Macquarie, NSW	68	20
Lachlan / Murrumbidgee, NSW	19	28
Lower Darling / Menindee, NSW	0	100

The Cotton BMP has just been selected as a project under the National Environmental Management Systems (EMS) pilot program. This project will expand on the current Best Management Practice Program to include key natural resource issues through the development and implementation of a comprehensive Land Water Module. The project will also assess the program's effectiveness in an EMS form. Three growing regions across Qld and NSW will initially be used to trial the module before it is implemented broadly across the industry throughout Qld and NSW.



A Working Example: Rice Environmental Champions Program

The Rice Industry Environmental Champions Program launched in 2001 is aimed at increasing the sustainability of the rice industry. The program aims to ensure rice based farming systems continue to be productive and financially sound, while enhancing their on-farm and regional environment.

Rice Environmental Champions is a five level achievement program that guides farmers through a series of activities. Each level contains different actions that are undertaken to gain credit under a program designed to link on-farm action with catchment improvement. The program has been designed to link environmental performance with better farm business performance.

Built into the program are activities from the rice industry's Biodiversity Strategy and Plan and the Greenhouse Challenge – both the first of their kind in Australian agriculture.

Like the Cotton BMP, the Rice Environmental Champions program has been selected as part of the National EMS Pilot Program. The pilot will operate across rice growing regions in NSW and Victoria. This project will involve 240 farmers in three trial cluster groups, with the results applicable to the remainder of the industry, and transferable to other industries.



TOR D
**Ways of increasing the up-take of such land use
management practices;**

As has long been the case, participation in community and industry led programs (such as Landcare, BMP and Land and Water Management Plans) is higher than government initiated programs.

Industry based BMPs are supported by growers because they are developed and driven by industry, relying on individuals and organisations with appropriate expertise in the preparation of specific modules. These programs establish a balance between the economic (e.g. productivity), social (e.g. workplace safety) and environmental (e.g. water re-use and pesticide management) goals of growers, their employees and their communities.

The irrigation industry strongly opposes the development of best management practice or environmental management systems by Governments, and the use of these as a regulatory tool.

Ongoing Government support of these industry based programs is essential.

Outcome Partnerships

As outlined in TOR (b), NSWIC's Integrated Catchment Management framework proposes that the "delivery" of catchment targets be undertaken by "Catchment Outcomes Partners. Catchment Authorities would strike agreements with Outcome Partners to deliver outcomes on the ground. These agreements would include financial contracts that deliver public money for those targets identified as "public good". Examples of outcome partners could be individual farmers, community groups, research institutions, non-government organisations, or companies. The nature of these agreements would vary according to the target or outcome being sought, and the entity the agreement is being struck with. For example, as the Wentworth Group propose, a property management plan might be an appropriate agreement format for an individual, while a company or non-government organisation may look to tender for more "regional" or sub-catchment based targets, where a "property management plan" would not be appropriate.



TOR E
**The effectiveness of management systems for
ensuring that sustainability measures for the
management of natural resources in New South Wales
are achieved;**

Much of the discussion above relating to catchment management frameworks and industry programs is relevant for the Committee's consideration of this term of reference.

In addition to these comments, a closer analysis of systems to ensure appropriate community participation in natural resource management decision making is required. Community leadership and acceptance is essential in ensuring our ongoing and improved sustainability, thus the role of the community in management systems is crucial.

Community Participation.

As outlined above in TOR A, the top-down approach of Governments to natural resource management has not been overly successful.

For too long, meaningful community participation in making decisions about how we manage our natural resources has been lacking. Committees established by Governments in the guise of community consultation are not empowered to make real decisions, and Ministers continue to override their recommendations.

Community involvement in natural resource management decisions must be based around active participation and not just the provision of information and tokenistic consultation. Isolating communities from decision-making about natural resources causes angst, breaks down the potential for constructive and cooperative solutions and destroys local ownership and trust.

The Organisation for Economic Co-operation and Development (OECD) has developed a set of guiding principles to assist member countries (including Australia) to strengthen their engagement with their citizens. According to the OECD, engaging citizens in policy-making is a sound investment and a core element of good governance.

Access to information, consultation and active participation in policy-making contributes to good governance by fostering greater transparency in policy-making; more accountability through direct public scrutiny and oversight; enhanced legitimacy of government decision-making processes; better quality policy decisions based on a wider range of information sources; and, finally, higher levels of implementation and compliance



*given greater public awareness of policies and participation in their design.*⁷

Governments must agree to, and implement, a community engagement framework that encompasses the OECD⁸ guiding principles and ensures that:

- (i). Information is complete, objective, reliable, relevant, easy to find and understand;
- (ii). Consultation has clear goals and rules defining the limits of the exercise and government's obligation to account for feedback and input; and
- (iii). Participation provides sufficient time and flexibility to allow for the emergence of new ideas and proposals from the community, as well as mechanisms for their integration into government policy-making processes.

Much can be done to improve community participation in natural resource decision-making. For example, Government can:

- ❑ Establish a clear framework for community involvement, to avoid the recent situation where expectations were not realised. This framework must set clear goals and rules defining the responsibilities and obligations of the community and government, and mechanisms for government to account for community feedback and input
- ❑ Adequately resource and support community members' involvement in consultation, particularly those involved in committees which require a high time commitment
- ❑ Provide timely, complete, objective, reliable, relevant and easy to find and understand information
- ❑ Allow the community sufficient time and flexibility to allow for the emergence of new ideas and proposals, and mechanisms to integrate these ideas into government policy-making processes
- ❑ Work with the community to ensure consistency with the clearly established legal and policy frameworks
- ❑ Undertake planning according to an appropriate timeframe, eg, high level, strategic planning (such as statewide policies) should be completed before resource or catchment specific planning is undertaken

⁷ OECD Handbook *Citizens as partners: Information, consultation and Public Perception in Policy-making*, OECD, 2001, p.13.

⁸ Ibid, p15.



- Implement an independent and public process of evaluating the success or failure of community engagement programs and taking the necessary action to address shortfalls



TOR F
**The impact of water management arrangements on
the management of salinity in NSW.**

Discussion presented in response to TOR A, B, C are relevant to the committee's consideration of this TOR.

