

IMPLEMENTING WATER REFORM IN QUEENSLAND, AUSTRALIA

CASE # 24

This case describes a series of legislative and policy developments which were undertaken to reform the water sector in the State of Queensland, Australia, in response to national government water reforms, deteriorating environmental quality and over-exploitation of both surface and groundwater resources. It illustrates how several tools of IWRM can be implemented simultaneously.

ABSTRACT

Description

A series of legislative and policy developments to reform the water sector in the State of Queensland, Australia were initiated during 1999-01. The measures, which are ongoing, followed Commonwealth (national) government water reform initiatives in 1996 and include:

- Use of consultation across the stakeholder spectrum from the high level of government through to farmers to help develop plans
- Preparation of draft policy papers followed by Bills to drive the process
- Preparation of supporting legislation for regulation of service providers, reform of water authorities, introduction of third party enforcement for offences, compliance notices, increased penalties
- Introduction of legislation to enshrine environmental flow requirements in the Development of Water (Allocation and Management) Bill
- Use of a ‘whole of river basin’ *strategic* plan approach within which *local resource operation* plans are prepared and implemented
- Integration of reforms with the local planning processes of Queensland.

Lessons learned

In the process it was felt that:

- An incremental approach, with water planning developing in ‘bite-sized chunks’, allowed government to be flexible in response to changing circumstances
- The process would have been streamlined if action had been taken earlier to separate regulatory functions from supply or service provision roles
- A clearer definition of roles and responsibilities of water providers, regulators and managers (government agencies, corporate organisations and irrigation companies) should have been established earlier in the process of water reform
- In water allocation to local governments (and, presumably, to other users), the government should not mandate how the allocated water is to be used. Instead, it should limit itself to allocation, and allow the local governments to specify how the allocated water is to be used.

Importance for IWRM

Strong example of how environmental flow requirements for rivers can be built into a planning process; includes assessment scenarios to demonstrate what makes a river “healthy”. Demonstrates how river-basin-scale water planning can be developed incrementally by engaging end-users, and how it can be linked to local government planning initiatives. Applicable to many other GWP regions in sub-humid/sub-tropical environments which are struggling with water reform.

Main tools used

- A1.1 Preparation of a national water resources policy
- A2.1 Water rights
- A2.3 Reform of existing legislation

MAIN TEXT

1 Background and problems

The situation in Queensland

The State of Queensland (area: 1,733,000km²) is located between approximately 11°S and 28°S in north-eastern Australia. The climate ranges from wet tropical in the north-east coast to sub-humid/semi arid in the south-west. Much of the northern part of the state has a tropical savannah climate. The hydrological regime is characterised by stochastic rainfall and runoff regimes. On average, Queensland uses 4591 GL (giga litres) of water per year, which is 19% of Australia's total use. Of the total water use, 2969 GL is used from surface water sources but 3202 GL of surface water is allocated to consumptive use. 1622 GL of water is used from groundwater sources. The sustainable yield of groundwater for Queensland is 2784 GL per year, which is 10% of Australia's total. 23 of the 107 Surface Water Management Areas and 53 of the 99 groundwater management units are assessed as being highly developed or overdeveloped (National Land and Water Audit, 2002. www.audit.ea.gov.au)

Prior to the reform process, the existing policies, legislation and water planning procedures had been proving inadequate for managing current water demands amongst competing users. The situation had been characterised by limited specification of water availability, allocation and use, disparate water laws, and few water planning procedures. There had been unworkable policies, legislation and water planning procedures, which had been inappropriate to both the emerging patterns of water demand and those in place at that time.

Reform was urgently needed to address this growing concern for the deterioration of Queensland's rivers and the concerns of irrigators about the poorly defined water planning environment. Another critical need addressed by the reform process was to clarify people's perceptions of their rights and entitlements to water. These perceptions had arisen from past water planning procedures in Queensland and included the right claimed by landowners to river water adjacent to their property and water which flowed over their property.

Central government initiatives

The stimulus for action was to implement the reform agenda of the Council of Australian Governments (COAG) framework for water reform (1996). This meant gaining access to increased national government funding and being congruent with water reform agendas in the whole of Australia. The COAG Framework is based on the recognition that action is needed to halt the widespread degradation of natural resources and to minimise unsustainable use of water resources. The Framework seeks to establish integrated and consistent approaches to water resource management throughout Australia.

The Framework includes provisions for water entitlements and trading, environmental requirements, institutional reform, public consultation and education, water pricing and research. The timeframes for implementation of the Framework in each Australian state were set at five to seven years, with full implementation by the year 2001. Timeframes for implementation were subsequently extended for certain aspects, including allocations and trading, which were extended to 2005.

Local institutions

Responsibility for managing water lies with the Queensland Department of Natural Resources and Mines, which is charged with meeting the present and future rural, industrial and urban needs of Queenslanders whilst ensuring river and groundwater systems remain healthy. This includes developing new water industry policies to comply with state and national agreements (as is the case with this reform), facilitating community catchment management and planning for adequate supplies of water to meet the economic growth of Queensland.

The Queensland Government also has programmes to develop an adequate, cost-effective and well-managed water infrastructure to supply bulk water, distribute water for irrigation and reduce the effects of flooding through the development and implementation of water management schemes and storm-water drainage. Ongoing planning and development of new water infrastructure aims to support continued economic growth and enhancement of community lifestyles. The Department is undertaking a major water infrastructure planning and development programme in consultation with clients. This will result in the supply of additional water for rural, industrial and urban use, improved groundwater management, increased water use efficiency, wastewater reuse, water quality monitoring and enhanced environmental management of waterways.

2 Decisions and actions taken

Response to central government legislation

The initial decision to comply with Commonwealth Government requirements by 2001 was taken by senior officers of the Queensland Department of Natural Resources, as required by the agreement between Heads of Government in 1996. The Department used a series of planning meetings and inter- and intra-office memoranda to determine the objectives of the reform. The main purpose identified was to provide a framework for the management of water and setting priorities for future water allocation, for reversing, where possible, the degradation of ecosystems and for progressively establishing tradeable water allocations.

Queensland faced some specific challenges:

- Separation of the regulatory and commercial functions of water entities
- Security and certainty for the environment and users
- Maximisation economic opportunity
- Separation of allocation and development.

To meet these objectives, the State water agency undertook the following actions:

- Development of a new Water Resources Act and Water Resources Plans
- Development of the government's role as a water provider through Sunwater, which operates under an "Interim Resource Operations Licence" (including infrastructure and constraints on operation, interim water allocations to be supplied, monitoring and reporting requirements).

During the transitional time, water customers operate under "Interim Water Allocations", which replace old licences and agreement orders in council. Final allocations will replace the interim when planning is finalised. Standard supply contracts were to be established by 12/2000.

A specific farm component was identified, through Land and Water Management Plans, which aims to:

- Provide certainty that water allocated by government will be used in a manner that does not cause degradation of land or water resources and
- Provide individual landholders with an effective farm management plan which demonstrates that irrigation farming practices are sustainable, both on- and off-farm.

The actions for the water reform process were developed in-house by government agency staff and involved a high level of consultation with leading water industry sector players in Queensland. Both high-level consultation (Water Industry Peak Consultation Committee and a Director Generals' Water Reform Steering Committee) and local level consultation (public meetings, internal meetings and submissions) were used to achieve water reform. This process involved the preparation of policy papers for discussion and enabled a high level of engagement by all levels of stakeholder.

The reform package uses a 'whole of river basin' strategic plan approach within which local resource operation plans (local plans) are prepared. These regulate service providers; reform water authorities; include third-part enforcement for offences, compliance notices, increased penalties, and are linked to the Integrated Planning Act (the local planning act of the State of Queensland). The activity described here was initiated in the period 1999-2001, and is ongoing.

Water Resource Plans

Water Resource Plans were developed for each river valley, and they:

- Establish the balance between consumptive and non-consumptive needs
- Set Environmental Flow Objectives
- Set Water Allocation Security Objectives
- Can establish regulatory control over overland flow water and subartesian groundwater in an area

The Minister of Natural Resources and Mines may impose a moratorium for the duration of the process.

Irrigation and land management

It is government policy that where water allocations for irrigation purposes are purchased either through new allocations becoming available or from another allocation holder, a LWMP (Land and water management plan) be prepared, where permitted. The plan must be approved by the Department of Natural Resources and Mines before that allocation can be used. LWMPs are property plans which describe infrastructure, natural resources and management practices in the use of land and water resources. They are prepared by individual landholders to plan the productive, profitable and sustainable use of water for irrigation purposes.

Land and water management plans are a response by the Queensland government to a COAG agreement that degradation issues involving water and the wider natural resource base need to be addressed.

3 Outcomes

The outcomes of the reform have been:

- Implementation of a new water act with more clearly specified rights and responsibilities of water users, providers and resource managers in the State of Queensland
- Separation of the regulating functions from water supply roles of agencies
- A more transparent process which includes stakeholders in decision-making at all levels – at high levels and the regional and farm level
- Mechanisms (water resources plans) have been implemented which will provide better opportunities to improve the health of Queensland rivers by specifying environmental flow requirements. It is expected that it will be several years before the full effect of these new flow roles and arrangements will produce the desired results.

Planning is proceeding. The use of an incremental approach allowed government to adjust its planning procedures and frameworks for water planning according to stakeholder concerns and to needs generated by unexpected outputs arising from the development of different water allocation scenarios. The development of water resource plans was also carried out across the state, valley by valley, allowing more streamlined and more efficient procedures to be used after the initial plans were produced.

It is too early to identify improvements in river health resulting from this water reform but there have been gains for both the state and water industry. The state benefits through the clearer demarcation of roles and responsibilities and the water industry now has a more stable and more clearly-defined water planning environment in which to plan water resource developments, in both the irrigation industry and in urban water supply provision.

Although the case is relatively new (the Acts have come on-line in the last 12 months) it seems, from their acceptance, that the process of developing water resource Plans and reforms will continue to be effective. The strength of the Queensland Department of Natural Resources and Mines lies in its flexible and adaptive management approach.

Institutions involved

The work has been undertaken by State Government funding through current in-house government programmes and Commonwealth Government funding support. This includes

funding stakeholder participation processes. The water resources plans have been developed into water law – each valley’s water plan has been enshrined in a new Water Act. No new entities have been created but the role of current entities (e.g. Sunwater) and government policy units has been clarified and refocused.

Issues and sustainability

If the water reform was to be implemented again, improvements could be made. Firstly, the process of “corporatising” (separating regulatory and operational functions and establishment of a separate corporate institution) should have been carried out earlier in the process. The new legislation in this water reform process needed internal functional reform much earlier and this would have resulted in swifter outcomes.

A second challenge, clearer specification of roles and responsibilities, should have also been faced earlier in the process. There was a need to consider the implications of separating water use from water allocation. Currently, government now does not specify water use with an allocation. Instead, it provides an allocation and allows local government planning procedures to specify how that water can be put to different uses (e.g. through the review of development applications for irrigation development, urban development). This problem is now being overcome incrementally as roles and responsibilities of water supply authorities and users are now being more clearly understood and their operations are now being implemented under the new arrangements outlined above.

4 Lessons learned

This case describes a fundamental and ambitious reform in water policy, covering all aspects of use and management.

A gradual, incremental approach to water reform allows governments to be flexible and to adjust planning procedures and planning frameworks to unexpected outcomes. It is best to build water planning in ‘bite-sized chunks’, to allow incremental reform to occur, rather than rapidly implementing radical, large- scale, comprehensive reform. This has not only allowed greater opportunity for stakeholders to participate in the process, but has also enabled both government and stakeholders to learn from their initial participation process and build better processes to work together. The water reform process has been developed valley by valley, and the procedure being used currently is more streamlined than that used in the Burdekin Valley where some of the first water reform work was undertaken. This approach, also known as the roll-out approach, allows experience from initial plans to be reflected in the preparation of subsequent plans.

The use of consultation with different stakeholders at different levels (executive level of government to farm level) helped develop plans effectively. The agency experience showed that engagement needs to be comprehensive and relevant to all stakeholder needs.

The sequence of using Draft Policy papers then Bills to drive the process of water reform proved effective in a State whose populace is reluctant to engage in rapid reform. The conservatism of the farming (irrigation) community (the largest users of rural water) and the commercial orientation of urban water service providers is best addressed with a ‘softly, softly’ approach to water reform.

However, it would have been useful if action had been taken earlier to separate regulatory functions from supply or service provision roles. Furthermore, a clearer definition of roles and responsibilities should have been established earlier.

In water allocation to local governments (and, presumably, to other users), the government should not mandate how the allocated water is to be used. Instead, it should limit itself to the allocation, and allow local governments to specify how the allocated water is to be used.

5 **References**

Published sources of information about the case study

The key website for Water Reform in Queensland materials is:

<http://www.nrm.qld.gov.au/resourcenet/water/awatereform/index.html>

Queensland Government. 2000 (June). Department of Natural Resources. Draft Water Allocation and Management Plan (Burnett Basin). [Draft Water Allocation and Management Plan] [an example].

Queensland Government. Department of Natural Resources. Fitzroy Basin Information Paper on Resource Operations Plan. Implementing the Water Allocation and Management Plan. Fitzroy Basin. 1999. [an example]

Council of Australian Governments (COAG) water reform programme:

<http://www.ea.gov.au/water/policy/coag.html>

6 **Contacts**

Dr Bruce Hooper

Director, Integrated Resource Management Research Pty Ltd., Brisbane.

126 Hawken Drive, St Lucia, Brisbane. AUSTRALIA 4067.

Email: Bruce.Hooper@catchment.com

Tel/Fax: Australia +61 7 3876 1616

Homepage: www.catchment.com

Mr Randall Cox,

Principal Policy Officer, Queensland Water Reform Unit

Queensland Department of Natural Resources and Mines, Brisbane.

GPO Box 2454, Brisbane 4001

Email: Randall.Cox@dnr.qld.gov.au

Tel: +61 7 3224 7375. Fax: +61 7 3406 2190