

**National Water Initiative – 2011 Biennial Assessment of  
Progress in Implementation Discussion Paper  
December 2010**

Queensland Farmers' Federation (QFF) is the peak body representing and uniting 16 of Queensland's rural industry organisations who work on behalf of primary producers across the state. QFF's mission is to secure a sustainable future for Queensland primary producers within a favourable social, economic and political environment by representing the common interests of its member organisations'. QFF's core business centres on resource security; water resources; environment and natural resources; industry development; economics; quarantine and trade.

Our goal is to secure a sustainable and profitable future for our members, as a core growth sector of the economy. Our members include:

- Australian Prawn Farmers' Association,
- CANEGROWERS,
- Cotton Australia,
- Growcom,
- Nursery and Garden Industry Queensland,
- Queensland Chicken Growers Association,
- Queensland Dairyfarmer's Organisation,
- Queensland Chicken Meat Council,
- Flower Association of Queensland Inc.,
- Pork Queensland Inc.,
- Biological Farmers of Australia
- Fitzroy Food and Fibre Association,
- Pioneer Valley Water Co-operative Limited,
- Central Downs Irrigators Limited, and
- Burdekin River Irrigators Association

## Introduction

Fundamental questions:

- ***Has the implementation of the NWI improved the efficiency and productivity of Australian water use?***
- ***To what extent has the NWI resulted in improved capacity and resilience of Australia's water management regime to deal with changes and shocks responsively and fairly?***
- ***Have the NWI commitments had an effect on the condition and health of surface and groundwater systems, and their ecosystems?***
- ***What factors have impacted on NWI implementation (e.g. drought, other government policies)?***
- ***Given that the NWI is only partially implemented, is full implementation likely to improve these outcomes?***
- ***How has the implementation of the NWI impacted on regional, rural and urban communities?***

It is difficult to provide any definitive response to these questions because it will take time to record evidence of the changes that may result from the implementation of water reforms in Queensland. QFF does not believe that there is an understanding yet in Canberra about the time and resources it will take to firstly fully implement water reforms and then give the process the time it will take to show results.

QFF has concerns however that water reforms will impede irrigation schemes and farms from modernizing because water resource planning defines entitlements based upon historic access and reliability. There is very limited progress being made in implementing measures such as capacity sharing that will allow irrigators in schemes to manage use to better cope with variable water availability. There are also a mix of smaller scale irrigation schemes interspersed with unsupplemented management areas along rivers in each catchment. These factors are effectively impeding pricing and trading reforms from pushing water to a higher and better use. Care must be taken to ensure that the climbing costs of implementing water reforms does not outpace the very slow progress being made in realizing benefits from the reforms.

It is concerning that the Murray Darling Basin planning process has now shifted the reform 'goal posts' significantly to achieve environmental outcomes at the expense of a balanced planning approach. This is introducing uncertainty both inside and outside the Basin which is seriously undermining achievement of the objectives of the NWI. The Murray Darling Basin planning process is also introducing a new layer of costs which could eventually flow through to water users. Further comment will be made about these concerns in comments provided on the 'key subject areas' following.

## **1. Water Planning**

### ***1.1. Have water plans improved security for water users? Has security improved for some users more than others?***

Water resource plans have defined security for water users based upon assessments of their historic access to water. The significant benefit is that the process has secured existing access against possible reduction in rights from ongoing development. The process had to address the difference in most Queensland catchments between supplemented and unsupplemented access. Groundwater planning has to adjust entitlements in certain areas to cope with problems of overallocation and environmental issues such as sea water intrusion. In most cases, it is recognised that these arrangements are needed to define secure entitlements. In regard to interception activities the State Government made a decision to secure stock and domestic use as a defined right in the Water Act 2000. QFF believes that interception activities for the purposes of irrigation has been achieved through defined area wide allocations in water resource plans and authorisation of interception works on farm to control development. Proposals in the Guide to the Murray Darling Basin Plan could overturn this approach and undermine the security provided in the Queensland water resource plans for defined interception activity. A process of fully regulating all interception activity could also introduce costs which far exceed the benefit of this regulation.

### ***1.2. Has the process for developing plans been transparent and taken all interests into account?***

The catchment based water planning process in Queensland has been a transparent process and has been conducted in a way that has sought to engage key areas of interest at the catchment and subcatchment level rather than just relying on peak representative groups for input.

On the other hand the Murray Darling Basin planning process to date has not been transparent. The Authority has been unable to provide sufficient information in the

Guide to the proposed Basin Plan and Technical Background to allow QFF or irrigator communities to understand how environmental water requirements and the sustainable diversion limits for each of the Queensland catchments have been determined. This leaves QFF and other stakeholders unable to prepare an informed response to the Authority on the Guide and opens a serious flaw in the consultation program for a Basin Plan that must be finalised in the next twelve months. The Authority cannot begin preparing a draft Basin Plan until they have received informed submissions from all impacted irrigation communities across the Basin. Basin planning has also not been in accord with the NWI by giving priority to meeting environmental outcomes rather than seeking to achieve a balance between environmental and economic and social outcomes.

**1.3. Have all interests, including the interests of Indigenous Australians, been adequately considered in water plans?**

It is understood that the Community reference panels established for each plan to get input on the development of the water resource plans have involved indigenous representatives to ensure that plans are developed to address the social and cultural interests of traditional owners together with the consumptive needs of aboriginal communities. Implementation of environmental flow objectives in each plan are important in providing for indigenous values. It is difficult to provide further comment on the adequacy of this consultation process for indigenous communities.

**1.4. If you have been involved in a water planning process, we would be interested in your experiences in the consultation that took place. Specifically, whether the consultation was inclusive; whether background reports or evidence for environmental flows or consumptive use was made available; whether the final plan made decisions about allocation transparent; and whether your perceptions of water security have changed as a result of being involved in the process.**

The initiation of water resource planning in each catchment has involved a staged process of consultation involving:

- Release of an Information Report and submissions
- Release of a draft water resource plan and submissions
- Release of a final water resource plan together with a report on how key issues raised in consultations and submissions have been addressed
- Release of draft Resource Operations Plan and submissions
- Release of final Resource Operations Plan

Most industry stakeholders have found the process of consultation in the initial development of water resource plans difficult given the complexity of the issues being addressed. There have also been difficulties with the time taken to complete the two stage process. However, it is apparent that water entitlement holders are coming to the table for the 10 year reviews of plans now being conducted in the Fitzroy and Burnett with a better understanding of the issues involved and the critical aspects of the initial plans that need attention. While we have yet to see the draft plans for the Fitzroy and the Burnett it is evident that work is focusing on refining aspects of the implementation of the plans rather than fundamental rewriting of the plans. Water entitlement holders also seem to be concentrating now on improvements in the planning process to address the reliability of supply of water rather than the longer term security issues.

QFF submits that attention must focus now on making the water resource planning process for the second generation plans more cost efficient. Options are being investigated by the Department of Environment and Resources Management to conduct the preparation of the water resource and resource operations plans as one process, saving significant time and cost. This should be able to be achieved without any adverse effects on consultation. Care also needs to be taken to ensure that monitoring programs are effective and efficient. The Bureau of Meteorology will have to play a key role in ensuring that monitoring programs are justified and can be implemented efficiently to provide data required to assess water planning implementation and outcomes.

## **2. Surface and Groundwater Connectivity**

### ***2.1. Are groundwater sources being effectively managed to ensure that ecosystems which depend upon them are identified and provided for? If so, where?***

While progress has been made with groundwater planning in the Queensland catchments it will take considerable time to prepare resource operations plans for a number of groundwater areas with an approved water resource plan. These areas include the Lockyer, Upper Burnett and Pioneer (ROP for Pioneer has just been announced). There are also important groundwater areas that have yet to have water plans prepared including the Condamine (Central Condamine Alluvium water resource plan being prepared) and the Burdekin scheme and delta area. It is accepted that in some areas management arrangements established for some time under water legislation prior to the Water Act are adequate to effectively manage the groundwater resources to meet ecosystem requirements provided use is metered. Examples include groundwater in Condamine tributaries. However, in important agricultural areas such as the Lockyer, Condamine Plain and Burdekin it is essential that the full water planning process is conducted to allow effective management and if feasible trading of entitlements within defined areas.

### ***2.2. Do allocation decisions and consequent extractions of water consider impacts on other groundwater or surface water users?***

Where a water resource plan has been prepared to address groundwater issues, impacts on surface water use have been assessed. The Wet Tropics water resource plan currently being prepared is a case example. A particular issue is the impact that the take of groundwater during the winter and spring months is having on both environmental needs and surface water access. There are many groundwater areas that have yet to be subject to water resource planning. Resourcing is an issue but QFF sees little value in fast tracking groundwater planning based upon inadequate scientific investigation of both environmental and consumptive needs. There would however be some value in the Department of Environment and Resource Management providing a report on progress with planning for important groundwater areas identifying in particular key areas for the conduct of water resource plans and resource operations plans.

## **3. Water Accounting and Water Data**

### ***3.1. Are metering, compliance and enforcement arrangements sufficient and effective?***

The Department of Environment and Resource Management released a report this year on the implementation of non-urban metering. Issues that arise from the

report which will have implications for the implementation of metering into the future include:

- Entitlement holders must not face unnecessary metering costs because arrangements have yet to be implemented to have new non-urban meters pattern-approved and laboratory-verified to comply with the requirements of NWI and trade measurement legislation. Contemporary meters will continue to be used until the end of their life provided that they comply with the Department's interim standards.
- It is doubted that entitlement holders have any understanding of the implications of the implementation of National Metering Standards or the likely costs of the implementation of these standards.
- A major investment program will be required to install new meters in water supply schemes and for unsupplemented use and to replace or upgrade non-compliant metering to comply with national standards by 2020. The estimated total cost for water supply schemes is \$154M and unsupplemented use in excess of \$24M over the ten year period. These costs will impose a significant burden on water entitlement holders. The Commonwealth Government must consider providing resourcing to implement this ambitious program.
- Provisions of Queensland Water legislation appear to be adequate to enforce metering and compliance with resource operations plans.
- Full regulation of water interception activities including stock and domestic requirements to meet sustainable diversion targets in the Murray Darling Basin Plan would be expected to significantly increase the costs of the implementation of the metering program in the Queensland Murray Darling catchments. The cost implications of this for a statewide program would be very significant. The added cost would far outweigh the benefit that would be achieved by this proposal either within the Queensland Murray Darling or statewide.

***3.2. Is there sufficient publicly available water data / information to meet your water use and management needs?***

The Department of Environment and Resource Management publishes annual reports on water resource plans, provides web site data on water flows but has stepped back from the provision of a wider spread of information that was made available annually in Water Statistics Reports. The Department has also discontinued web information on water trading. Sufficient resourcing to provide 'live' information for the State is obviously an issue. Water service providers such as SunWater also maintain web based systems for their customers.

However, as the Bureau of Meteorology is now responsible for providing coordinated water data/information Australia wide it is understandable that the State Departments would not plan to continue systems that duplicate this role. Until the first National Water Accounts are available in April next year backed up other proposed products such as national water resources assessments, real-time water reporting services and real-time water availability forecasts, there is a data and information deficiency in Queensland.

## 4. Environmental Water

### **4.1. Is the quality of scientific information used in determining Environmental Water Requirements adequate? If not, in which respects do you think it is inadequate and in what water systems?**

It is not considered that there is sufficient scientific information for agencies to determine environmental water requirements for the purposes of developing water resource plans. Implementing the concept of an Environmental Water Manager whose task it is to manage water on a seasonal basis to achieve environmental outcomes is well beyond the capacity of any agency.

QFF has supported the Queensland catchment by catchment approach to facilitate the assessment of environmental requirements in terms of the risk to river health, recognising that the environmental flow needs of a river system are impossible to determine exactly. Technical panels with appropriate environmental and other expertise are established for each plan area. In the preparation of each plan the determination of the risk for the river system involves consideration of water needed for existing and future development. A balance must be achieved in each plan between environmental values and industry and community needs for water. The water resource plans define environmental flow objectives and water allocation security objectives for water users. To achieve these objectives, the plans impose flow-based rules for supplemented and un-supplemented water which stipulate environmental flow releases from storages and restricting the take of water in different flow conditions (high and low flows). Monitoring is conducted to determine whether objectives are being met over the ten year term of the plan. This flow based approach is well suited to Queensland conditions. The quality of planning based on this approach is to be assessed with each 10 year review taking into account the best available science. Overall, it is fully recognised that the quality of planning is heavily dependent on availability of information to assess environmental water risks and requirements. The quality of information will improve with time and experience implementing water resource plans.

The Murray Darling Basin planning process highlights the problems of the limitations of the quality of scientific information. The Guide and supporting reports fail to justify how environmental water requirements have been derived. It is unclear how an environmental watering plan can be prepared without more explicit definition of environmental watering needs.

### **4.2. Are the processes used to determine Environmental Watering Plans sufficiently open and transparent?**

Comments under Items 1.2 and 1.4 refers

### **4.3. Are environmental water provisions identified in water plans being met and are adequate monitoring provisions in place to check that the desired environmental outcomes are being achieved?**

The core objective of the rules based approach adopted in Queensland water resource plans to address environmental outcomes. This approach applies rules for dam releases and restrictions on un-supplemented water access to ensure environmental flows will be achieved for varied flow conditions. In other words, the

rules give highest priority to the achievement of environmental flows. Proof of that security in terms of delivery of actual flows has to be achieved through plan monitoring and reporting. Annual reporting is providing information on environmental flows achieved during the past seasons. However, the 10 year plan reviews should assess the achievement of environmental objectives taking into account the best available science. It is difficult to see how a greater level of security can be attached to this water without more definition about environmental assets and risks. In time, advanced research and experience with the implementation of the plans should provide the advice required to better specify environmental flow objectives and better define and apply the rules to achieve these objectives. It is important also to assess the benefits of achieving greater security for instream flows for the environment in comparison with need to address other issues that may have a more important bearing on catchment health.

***4.4. Are properly resourced environmental water managers and holders with clear authority, responsibility and accountability in place?***

The management of environmental water is not conducted separately from the water planning function in Queensland. The water planning and management section of DERM conduct both functions at a statewide and regional level. QFF sees little justification for splitting this function. It is important that the water planning and management is fully integrated.

In addition, as discussed above in item 4.1 it is doubtful that there is sufficient scientific information to guide an environmental manager to make decisions regarding seasonal environmental flow requirements. The water resource planning system puts in place flow based requirements to meet environmental objectives. Overlaying this approach with a day to day environmental flow management function is unlikely to achieve much particularly for systems which have significant unsupplemented management areas.

It will be interesting to evaluate the role the Commonwealth Environmental Manager plays in the Queenslandd Murray Darling catchments where 75% of water use is flow based (ie not supplied from storages).

***4.5. Are adequate river and wetland health monitoring protocols in place to report on the ecological condition of systems and to trigger management responses? Are there good examples?***

Ecological monitoring and assessment for each water resource plan focuses on prioritized ecological assets. For example in the Fitzroy water resource plan currently under review assets such the Fitzroy golden perch, water holes and riffle sections of rivers were chosen because of the importance of flow management to sustain these assets. Monitoring activities can then be defined and implemented to measure performance of these assets eg abundance of eggs, larvae and juvenile golden perch during flow and non flow events. The current review of the Fitzroy plan is conducting detailed research into the critical flow requirements of a much wider range of selected indicator assets as part of the assessment of the effectiveness of the plan after 10 years.

## **5. Addressing Over-allocation and Overuse**

### ***5.1. Is overallocation or overuse being clearly identified and addressed in Australia?***

Planning for groundwater in many areas of this State is addressing issues of overallocation or overuse. The preparation of the water resource plans for groundwater areas to date has conducted sufficient analysis to indentify the problems and their causes. For example, the draft water resource plan amendment for the Pioneer catchment conducted sufficient analysis to indentify a salt water intrusion problem and proposed two alternatives to reduce the take of water and arrest salt water intrusion within defined areas of the plan. The Condamine Balonne water resource plan also identified problems and implemented measures to reduce water take. Most coastal catchments have unallocated water and therefore don't face problems.

However, both options canvassed left entitlement holders in the areas affected by salt water intrusion to bear the full impact of addressing the problem through reductions in their entitlements under the proposed plan. Industry is seeking ways to lessen this burden on affected irrigators but there is little scope in the water resource planning process to have adjustment measures investigated.

### ***5.2. Are the relationships between pathways for returning overallocated or overused systems to sustainable levels, such as buybacks, and the water needed for environmental assets clear?***

There are no buyback or similar financial support packages provided by the Qld Government to help water entitlement holders in overallocated catchments to adjust. Measures are applied to help adjustment such as time to make defined transitions.

## **6. Water entitlements**

### ***6.1. Is further entitlement reform, including potentially unbundling and entitlements for new urban water sources, warranted?***

No comment

### ***6.2. Where water systems cross state boundaries, are differences in allocation polices beneficial or do they cause problems?***

Effective provisions are being put in place in resource operations plans such as for the Border Rivers that address differences in allocation policies. This is important to allow for interstate trading agreements between operators in Queensland schemes and their counterparts in NSW before interstate trading can commence on a permanent or temporary basis for supplemented water. Regulators for both states must also have agreements for trading unsupplemented water. This issue has involved some discussion as the NSW side is predominantly supplemented on the main rivers whereas in Queensland above Goondiwindi the river system is substantially unsupplemented. Interstate trading agreements must also address metering and collection of water use information. The other Queensland Murray Darling ROPs allow for amendment to give effect to any interstate agreement regarding the supply of water that may be signed after the commencement of the plan.

**6.3. How transparent are allocation policies to be applied in extreme scenarios – is it clear in advance how extreme drought will affect entitlements, for example?**

Critical water supply strategies are in place for each water supply scheme so it is clear in advance how a drought occurrence will be handled. In practice in long running droughts effort has been made to help medium supply customers through these critical periods, eg allowing very reduced access for critical periods and relief from payment of fixed tariffs. Overall, however there are clear rules in each scheme for reduction and shut down of medium priority take during low flow periods. In some schemes it may be a defined cut off in supply at a particular storage threshold or in others a requirement to hold high priority supply sufficient for up to two years. It has been necessary in a number of schemes to opt for the supply cut off because inflows in extreme drought years have not been sufficient to meet high reliability needs.

**6.4. Has the process of unbundling water from land title, creating an exclusive and tradeable commodity, improved confidence in the water availability and water delivery? Has this confidence been affected by water planning arrangements?**

**6.5. What actions can the government take to improve confidence in water entitlements?**

Water availability has been low in most areas due to drought so it is difficult to see any changes during this period. Current announced allocation systems implemented in most areas do not encourage cross seasonal management of water use. QFF would like to see more development of capacity share arrangements to replace seasonal announced allocation systems. It is understood that improvements will be necessary in water plan modeling and monitoring systems for many schemes to implement capacity share systems.

## **7. Water markets and trading**

**7.1. What are the positive or negative impacts resulting from water trade?**

The establishment of trading markets is still at an early stage of development in key catchments.

**7.2. Is adequate information to support water trade available and accessible?**

At this stage there is little information available on water trading.

**7.3. What is your view of the complexity, time, and costs involved in trading water?**

**7.4. Are there significant barriers to trade? If so, what are they?**

Markets in Queensland are localised based upon individual schemes or defined unsupplemented water management areas. Measures implemented in catchment water resource plans to protect environmental flows and third parties significantly constrain the extent of water trading that can be specifically permitted or prohibited in the resource operations plans (ROP). In addition, natural flow variations along the extensive lengths of unregulated streams in these catchments are not measured sufficiently to define rules for water trading that will meet the environmental and water security objectives of the water resource plans. In these areas it is up to proponents to make a submission to the Department for approval to trade along unregulated streams.

**7.5. If you have participated in water markets directly or indirectly, have water markets been valuable to you, and why do you use them? You may wish to briefly describe your experiences.**

No comment

**7.6. Is there likely to be benefit in further developing water markets for different water products (eg recycled water) or in new market areas (eg outside the Murray Darling Basin)?**

The cost of recycled water is still a significant constraint to the increased use of recycled water and therefore to the development of a water market in this water product

## **8. Pricing, Demand Management and Other Policy Initiatives**

The Queensland Government has instructed the Queensland Competition Authority (QCA) to advise on new prices for SunWater schemes to apply for a five year period from July 2011. QCA is to investigate the recovery of the full annual costs of operating, maintaining and refurbishing schemes and a return on the value of scheme bulk water supply assets (ie dams and other headworks) and the value of any new works to be constructed over the next five years. The Government is not seeking to recover the value of channel systems such as those in the Burdekin, Emerald and Bundaberg. It is expected that irrigation prices will have to increase substantially to cover steep rises in electricity and other operational costs in recent years and forecast increases in these costs over the next five years. The recovery of a full rate of return on headworks will further boost prices although the Government intends to phase these significant increases in over 15 years. QCA is to assess the capacity to pay to determine how price increases are to be phased in for each scheme.

QFF is opposed to the Government's decision for the following reasons:

1. Schemes that will have to pay much higher prices to cover a rate of return on existing bulk water supply assets (i.e. dams and other headworks) are unlikely to agree to further investment, with the addition of a rate of return, to modernise and to address environmental issues.
2. Capacity to pay investigations will not be given the time or funds necessary to adequately assess the differences between channel and river based schemes, between the range of agricultural products grown in each scheme and between growers. Variations in the market value of agricultural produce into the future will also have to be assessed.
3. There is no attention being given to the loss of proactive management skills at the scheme level and the demise of scheme advisory committees. The issue of local management needs to be addressed to drive for efficiencies in the implementation of price paths particularly in channel schemes.
4. There is no provision to restructure schemes (e.g. local management, variations in levels of service) that are unable or will be unable to pay the prices required to cover costs. Underperforming schemes face an uncertain future under this approach.
5. The approach to rate of return is not consistent with that adopted in southern states and is likely to result in water prices in SunWater schemes that are not competitive with southern schemes. There are also State and Commonwealth Government investment programs which are helping southern schemes to modernise and be competitive.

6. Overall, this approach provides no encouragement for operators and customers to take a forward looking approach to plan and invest in scheme modernisation and environmental sustainability.

## **9. Urban**

No comment.