Queensland

Water Amendment Regulation (No. 1) 2005

Regulatory Impact Statement for SL 2005 No. 10

made under the

Water Act 2000

Title

Metering Policy Water Regulation 2002.

Authorising law

Provisions of the *Water Act 2000* as follows—

- Section 1014(2)(d) provides that a regulation may be made setting out details of when a meter must be installed, who may install it and payment arrangements;
- Section 973 provides for the appointment and qualifications of metering contractors;
- Sections 974, 975 and 976 provide that metering contractors must have identity cards and when they should use them;
- Section 977 provides the power for metering contractors to enter places for metering related purposes;
- Section 978 requires persons to not obstruct metering contractors;
- Section 979 and 980 provide for the metering contractor to notify landowners of any damage they may have caused and processes for claiming compensation.

Prepared by

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Purpose statement

A Regulatory Impact Statement (RIS) is designed to determine whether or not a Regulation is the most efficient and effective way of achieving the objectives of an Act.

Proposed legislation

Background

The Water Resource Planning and Resource Operations Planning process will create "water allocations" conservatively worth in excess of $1 Billion. It is those assets which are to be protected by metering.

In October 2002, an interim metering policy for unsupplemented water users was endorsed by the Queensland Government. The policy established a framework for metering in rural Queensland. The introduction of meters for water extraction monitoring in rural Queensland is critical to the development of effective resource management practices for water. This approach is consistent with the micro economic reforms being implemented nationally as part of the Council of Australian Government Water Reform Agenda and the National Water Initiatives.

The Department of Natural Resources and Mines ***(NR&M)*** has been implementing the Interim Meter Water Extraction Policy in pilot areas. These pilots have actively engaged local irrigators. Experience from these pilots has been incorporated in the current draft Policy. Irrigators have shown general support and in some cases requesting NR&M to accelerate the program.

NR&M has undertaken detailed analysis to identify the optimal contractual engagement of the private sector in the metering project to

provide value for money for government and the water users. The revised Metering Watering Extractions Policy incorporates recommendations and changes identified by the metering pilots and the project implementation analysis.

Section 1014(2)(d) of the *Water Act 2000* provides that a regulation may be made setting out details of when the meter must be installed, who may install it and payment arrangements. The proposed amendments to the *Water Regulation 2002* are being undertaken to provide for metering implementation throughout the State.

The regulation amendments will—

- Define what classes of water entitlements and statutory authorisations will be a metered entitlement;
- Require a metered entitlement to take water through a meter;
- Clarify that the meter is to be owned by the state or a third party, but not the holder of the metered entitlement;
- Provide powers for the site assessment, installation, maintenance and reading of meters;
- Establish offence provisions for non-compliance; and
- Provide a charging regime for the installation, maintenance and reading of the meters.

The metering policy and the proposal to amend the Water Regulation have been developed in consultation with the Water Reform Implementation Group comprising NR&M, the Queensland Irrigators' Council, CANEGROWERS, AgForce, Local Government Association of Queensland, Queensland Conservation Council, Australian Conservation Foundation, World Wide Fund for Nature, Brisbane City Council, Environmental Defenders Office, Queensland Dairyfarmers' Organisation, Queensland Fruit and Vegetable Growers, Cotton Australia and the Queensland Seafood Industry Association. The policy has also been discussed with Border Rivers Food and Fibre and the Combined Weir River Water Users Associations.

The latest draft of the proposed Regulation may be found at Appendix 1 at the back of this Regulatory Impact Statement.

Policy objectives

The main purpose of the regulation amendments is—

- to implement a system of compulsory use of water meters (for the collection of accurate data) in relation to taking or interfering with water in the state; in order to
- facilitate effective resource management practices for water.

In an environment where there is so much concern about the salinity damage, over-allocated water supply and the establishment of environmental flows, it is appropriate that resource management practices are introduced to prevent further environmental damage and community anxiety.

The introduction of meters for water extraction monitoring in rural Queensland is critical to the development of effective resource management practices for water and is clearly consistent with the whole-of-government priority, `Valuing the Environment`.

Water is a precious and limited resource that must be managed carefully. Measuring and monitoring water use is an important management tool and is necessary for a number of reasons, including—

- Equitable water use—metering ensures that a valuable resource is taken according to user's entitlements and this aspect is supported by farmer groups;
- Compliance monitoring—to ensure water users are complying with the conditions of their entitlements. Water allocations are increasingly valuable assets that need to be protected with effective compliance processes. Water use monitoring aims to ensure that excess or unauthorised water take does not erode the security of these valuable assets;
- Water planning activities—to determine whether water resource plans are achieving the water allocation security objectives and setting sustainable extraction rates through monitoring the performance of individual's entitlements;
- Management of activities—to properly manage the resource, we need to be able to monitor how much water people take, where and when. This is even more important now that the *Water Act 2000* provides for the creation of tradeable water allocations.

Water meters and related monitoring are necessary to support trading processes; and

- On farm management—as water becomes more valuable, and tradeable, the amount of water being used needs to be accurately determined to preserve the integrity of the asset.

Metering will affect any unsupplemented water user who meets the triggers for meter installation as set out in the Metering Water Extractions Policy (approximately 8,000–10,000 users).

Metering is part of the overall policy package benefiting water users and the community. This package includes the granting of open ended water allocations, provision for trading, and cost reflective water charges.

Legislative intent

NR&M has traditionally had the power to require users to install meters and have charged users for the purchase, installation, maintenance and reading of meters. The Metering Water Extractions Policy extends the current powers and adopts a standardised 'user pays' methodology.

The legislation intends that all new meters are owned and maintained by NR&M, with all metering costs being met by users. This is consistent with what happens with utility meters (e.g. gas and electricity) and meters in Sun Water systems.

The requirement for a meter to be installed is set out in NR&M's Interim Metering Water Extractions Policy (Appendix 2), which identifies a number of specific triggers that will lead to the introduction of meters such as transferable water allocations, volumetric licences and at risk areas.

An annual metering service charge will be payable by all users that are required to have a meter installed, and will consist of—

- A meter use charge (initial site assessment, purchase and installation costs, and borrowing costs); and
- A meter operating charge (maintenance, reading, administration and borrowing costs).

The metering policy and charges have been developed to provide a framework for metering in rural Queensland and aims to provide a standardised process from needs assessment through to implementation and ongoing maintenance and reading of meters. Metering is the most effective way to measure the take of water for resource management, compliance and billing purposes and the standardised process will contribute to the collection of accurate data.

Consistency with the authorising law

The policy objectives of the *Water Act 2000* are to provide for the sustainable management of water and other resources, a regulatory framework for providing water and sewerage services and the establishment and operation of water authorities, and for other purposes.

In regard to water allocation and management, the Act aims to achieve the policy objectives through the following approaches—

- A statutory based Water Resource Planning process to balance the needs of the environment and consumptive water users;
- Clearly defined water allocations separable from land title and able to be transferred permanently by water users;
- A resource management regulatory framework that applies to all water service providers irrespective of ownership;
- Provision for the control of overland flow, where necessary, for improved water sharing and security, as well as for environmental protection;
- The ability to address strategic issues relating to the use of unallocated water as part of the Water Resource Planning process; and
- Separation of water allocations and works approvals to more effectively address decision making on each of these aspects.

The proposed legislation is consistent with the policy objectives of the *Water Act 2000* as follows—

1 The policy objective of section 214(b) is to require water meters to be made a condition of a water licence. The proposed regulation achieves the objective by ensuring that the triggers for

metering installation are met, which includes licence holders being required to install a meter.

2 The policy objective of section 968 is to require development permits for existing works (section 968). The proposed regulation achieves the objective by ensuring that the preparation of onsite works are required to be suitable for metering installation; and

3 The policy objective of section 1014(2)(d) is a general regulation making power which requires a meter to measure the volume, rate and time water is taken, who may install a meter, who must pay and the arrangements for payment and the minimum standards for the design, construction, installation and maintenance of meters. The proposed regulation achieves the objective by providing more detail for users on each of these points.

Consistency with other legislation

The proposed legislation is not inconsistent with other legislation, such as the—

- *Integrated Planning Act 1997;*
- *Environmental Protection Act 1994.*

Fundamental legislative principles

The proposed regulation is consistent with fundamental legislative principles. Any access to land to install meters will be undertaken through consent or through the powers of the *Water Act 2000*. Statutory powers of entry provide compensation for any loss or damage caused in carrying out metering activities.

National Competition Policy

All Australian Governments agreed to the National Competition Policy ***(NCP)*** in April 1995.

The aim of the NCP reform program is to deliver tangible benefits to all sectors of the community. This is to be achieved by limiting anti-competitive conduct and removing special advantages of government business activities where it is in the public interest to do so.

There are no restrictions on competition that would result from the proposed legislation. All tenders for contracts will be prepared under terms of the State Purchasing Policy.

Options and alternatives

What are the alternative ways of achieving the policy objectives of the proposed legislation and why were they rejected? (section 44(f) of *Statutory Instruments Act 1992.*)

Three options for achieving the policy objectives have been explored. These include—

- the "status quo" or do nothing different;
- state ownership and management of water meters; and
- water user ownership and management of water meters.

The reasons for supporting or rejecting each option are outlined below.

1 Status quo (do nothing different)—no new regulation

This approach would involve continuing metering in accordance with current practice and not extending metering to water users in a standardised and efficient manner.

NR&M has traditionally had the power to require users to install meters and have charged users for the purchase, installation, maintenance and reading of meters (in some cases users have installed the meter, in other cases NR&M has been responsible for this).

Under the *Water Resources Act 1989*, section 44 (1)(a) provided for licences to be subject to terms decided by the Chief Executive Officer. Licence conditions were attached to licences to reflect these terms. In regard to metering, most licences had conditions such as the following attached to them—

> If required by the chief executive, a meter of a type approved by the chief executive to record the volume of water taken under the authority of this water licence must be purchased and installed at the licensee's expense. The meter is to be installed within the time specified by the chief executive. The meter upon being installed shall become the property of the chief executive who may remove it at any time. The licensee shall not remove the meter for any reason without the written approval of the chief executive nor shall the licensee take any action, which results in the meter failing to register correctly the volume of water diverted by means of the licensed work. After being required to fit a meter, the licensee shall not take water under the authority of this licence until an approved type of meter to record the volume of water passing through the licensed work has been installed.

These terms were attached to licences and permits, including at times, riparian permits for stock and domestic take. At this time, water was controlled and regulated through the use of licences and permits, and the metering licence condition could be attached to either of these.

Historically, NR&M was responsible for metering supplemented and unsupplemented water users. Supplemented water is now the responsibility of the corporatised SunWater. The *Water Resources Act 1989* also provided for users to be charged for meter reading and maintenance and this ability has been reflected in the *Water Act 2000* and the current *Water Regulation 2002*. Schedule 14 of the Water Regulation lists current water charges, some of which include a specific metering charge, (refer Gowrie-Oakey Creek water management area).

As water resources are becoming scarcer and more valuable, NR&M needs to increase the number of authorisations to take water, that will be metered. Although, this increase can largely occur under the old Water Resources Act framework, by simply activating the existing licence conditions.

There are a number of reasons why the "status quo" option would not meet the policy objectives. These include—

- Under the current water management framework of the *Water Act 2000*, a range of water authorisations have been provided for including licences and permits but also water allocations and statutory authorisations. The existing mechanisms for requiring meters to be installed (e.g. licence conditions) do not provide for these new types of authorisations.

- Current meter installation practices have generally included a combination of user owns and installs and NR&M owns and installs. This approach has resulted in meter selection and installation arrangements that are inconsistent across the State and in many cases technically incorrect (against manufacturers specifications).

2 Water user ownership and management of water meters—new regulation

This approach would involve amending the *Water Regulation 2002*, to establish a system of compulsory use of water meters in relation to taking or interfering with water in the State. Implementation would rely on water users owning and installing their own meters in accordance with specifications provided by the State.

There are a number of reasons why this option would not meet the policy objectives of the policy. These include—

- In-accurate data—Water user ownership and management of meters is not recommended as it gives rise to inconsistencies in types of meters, standards of installation and levels of maintenance (and therefore accuracy). This can mean data is of limited use and will impede the State's capacity to effectively manage water resources.
- Significant Audit Costs—Significant resources would be required to police installation and maintenance standards. These costs would ultimately be borne by the users.
- Effectiveness of Compliance Action—It would be very difficult to progress a compliance action for unauthorised water take, if NR&M cannot assure the Court that the meter (which is providing the evidence) has been installed and maintained according to manufacturers specifications.
- Technology improvements—User ownership of meters would limit the capacity for the State to upgrade installations as technologies develop. The state is currently undertaking telemetry trials to assess the cost and application of telemetry. Telemetry systems for meter reading may be used in the future to reduce the costs for the physical reading of meters. Ongoing research will look at type of data being received and the cost of retrieving that data.

- National Standards for Water Meters—The National Measurement Institute is currently developing national standards for water meters. In the future it will be mandatory for all water meters to comply with these standards and NR&M will be responsible for ensuring that all water meters used for trading purposes comply. Consequently, under user ownership arrangements, significant resources will be required to police compliance with the national standards. These costs would be passed on to the user.

3 State ownership and management of water meters—new regulation

This approach would involve doing amendments to the *Water Regulation 2002*, to establish a system of compulsory use of water meters in relation to taking or interfering with water in the state. Implementation would be based on the Interim Metering Water Extractions Policy that has previously been consulted on and is available on NR&M's web page.

The metering policy establishes a framework for metering in rural Queensland and identifies—

- Specific "triggers" that lead to the introduction of meters;
- Future ownership arrangements for meters (State owned);
- Funding arrangements (user pays);
- The development of meter specifications and the recognition of proposed national standards; and
- Implementation processes that include state management of the future purchase, installation, maintenance and reading of meters.

The Metering Policy is an extension of existing government policy in regard to metering in that it simply clarifies the government's position in relation to how metering applies to new and existing authorisation types.

All meters in unsupplemented areas will be owned by NR&M. Existing meters in unsupplemented areas will be assessed for compliance with NR&M meter specifications when meter implementation occurs in an area. Existing meters will then be either replaced or will come under the metering service charge regime.

NR&M ownership of water metres is consistent with the treatment of utility meters (e.g. gas and electricity) and meters in SunWater systems. It is also consistent with a number of situations where unsupplemented users are currently metered.

Similar to the approach taken by other utilities, all metering costs will be clearly identified and met by the water user. There will be an annual metering service charge, which includes the provision of an operational water meter. Should early replacement of a meter be required, NR&M will install a replacement meter at no further charge to the user as part of the metering service.

The adoption of NR&M ownership of water meters, rather than user ownership, is to prevent the rise of inconsistencies in types of meters (and therefore accuracy), standards of installation, and levels of maintenance, which together have an adverse impact on meter accuracy as well as ongoing costs. Inaccurate data is of limited use in achieving current water resource management objectives.

Metering is the most effective way to measure the take of water for resource management, compliance and billing purposes. Every effort will be made to ensure metering is carried out in the most cost-effective way while still meeting the key objectives of accurate data and a capacity to upgrade meter installations with advancing technologies. Implementation will involve NR&M staff working with local representatives on meter area project teams to ensure that local circumstances are taken into account during implementation. In addition, competitive tendering processes will be adopted to ensure cost efficiencies are achieved.

Summary

The "status quo" presently provides for metering of licences in a non-standardised non-cost effective manner. It does not provide for metering of "new" water allocations or statutory authorisations. In addition, this approach has resulted in meter selection and installation arrangements that are inconsistent across the State and in many cases technically incorrect (against manufacturers specifications).

The user ownership and management of water meters option has too many risks associated with the long term maintenance of meters and accuracy of data to ensure that the resource management policy objectives will be met.

The proposed State ownership and management of water meters is the preferred option for implementing compulsory use of water meters and collecting reliable data for resource management purposes.

Stakeholders and consultation

The benefits and costs of the proposed regulation have been considered for three main stakeholder groups. These groups include—

- Rural Stakeholders (it is estimated that approximately 16 000 additional meters may be required as a result of this policy. This would affect an estimated 8,000—10,000 water users, most of whom would be irrigators);
- State Government (NR&M); and
- the General Community.

The Regulatory Impact Statement and draft regulation will be made available for comment from the beginning of December 2004 until the end of January 2005. Following this, any submissions will be analysed and considered in finalising the policy and the regulation amendments. Finalisation is expected to occur by March 2005.

The following stakeholders have been consulted throughout the process of developing the Act and draft Regulation.

Rural stakeholders (irrigators)

The Interim Metering Water Extractions Policy has been published on the NR&M website and information brochures have been provided to all regional offices. The policy has been developed over the last three years in conjunction with the Water Reform Implementation Group consisting of key stakeholder groups such as—the Queensland Irrigators' Council, CANEGROWERS, AgForce, Local Government Association of Queensland, Queensland Conservation Council, Australian Conservation Foundation, World Wide Fund for Nature, Brisbane City Council, Environmental Defenders Office, Queensland Dairyfarmers' Organisation, Queensland Fruit and Vegetable Growers, Cotton Australia, Queensland Seafood Industry Association. The policy has also been discussed with Border Rivers Food and Fibre and

the Combined Weir River Water Users Associations. The Water Reform Implementation Group supports metering and NR&M's approach to minimising costs to users through competitive tendering and maximum use of private sector. They also support the inclusion of local user representatives on project area steering committees.

Further community consultation will be dealt with on a case-by-case basis having regard to local circumstances as part of the metering implementation process. Consultation on metering will also be incorporated into the Water Resource Planning and Resource Operations Planning consultation arrangements.

State government/NR&M

NR&M departmental officers in Head Office and the regions have been meeting regularly to discuss metering issues associated with policy development and implementation. A Water Metering Project Board has been established to oversee the implementation of the Water Metering Project.

State Government Agencies have been consulted via the Water Reform Implementation Group. In addition, separate consultation has occurred with the Office of Fair Trading, Department of the Premier and Cabinet and Queensland Treasury.

General community

Industry and Environmental groups have been kept informed on a regular basis via the Water Reform Implementation Group.

Qualitative impact assessment

Benefits and Costs—What are the benefits and costs of implementing the proposed legislation as compared with any reasonable alternative? (section 44(g) of *Statutory Instruments Act 1992*)

A comprehensive and verifiable quantitative assessment of the impacts on stakeholders is not possible to achieve because of the lack of readily available reliable data and the prohibitive expense involved

to carry out research to collect the data. The ratings of H+, M+, L+, L-, M-, and H- have been adopted in line with the RIS Assistant software provided by the Business Regulation Reform Unit.

H, M, L stand for high, medium and low respectively with + indicating a positive impact with - a negative impact. These ratings should be considered as indicative only and it is more important to consider the relativities between the categories, that is, medium is greater than low and high is greater than medium when interpreting these qualitative assessments. However, where monetary values are known for particular categories of costs and benefits, these will be introduced into the analysis.

Alternative—do nothing different (no regulation)

This is considered to be the "without regulation" scenario against which the two regulatory alternatives will be rated. Do nothing applies to not having the Regulation which means that irrigators would continue to be metered in an adhoc, non standardised manner. In addition, water users with water allocations and statutory authorisations would not be required to be metered.

Rural stakeholders (largely irrigators)

Benefits—

Water Allocation and Statutory Authorisation users would not be required to install meters.

Costs—

There would be direct cost to the irrigator, as meters are required and no cost efficiencies could be gained through bulk purchase and installation. In addition, an incomplete and inconsistent level of metering would result in some indirect costs to some irrigators arising from—

- Reduced security of supply as water allocation use cannot be measured;
- Reduced security of supply as water modelling scenarios are developed on dubious data;
- Inability to trade water as water to be traded cannot be measured; and

- Lost opportunity to expand into higher return uses.

The *Water Act 2000* provides for the creation of tradeable water allocations. Water meters and related monitoring are necessary to support trading processes. Insufficient knowledge on volumetric usage could stifle trading of unused entitlements, which in turn could stifle the growth of higher value enterprises.

State government (NR&M)

Benefits—

The State could continue to meter licensed water users under "user pays" arrangements as required.

Costs—

The main risk associated with not adequately measuring water use/ take is the inability to effectively develop resource management practices. The extended application of meters for water extraction monitoring in rural Queensland is critical to the development of effective resource management practices for water.

Metering has traditionally been a critical management tool used by NR&M to—

- ensure water is taken equitably;
- monitor compliance with water entitlements; and
- monitor water use to facilitate management activities.

Now, in the changing world of water resource management, metering becomes increasingly critical for—

- determining whether Water Resource Plans are achieving their objectives; and
- to facilitate water trading activities.

Under "status quo" arrangements there will be no information on water use from such authorisations as water allocations and statutory authorisations, for the government to—

- monitor water use and compliance with water entitlements;
- assist farmers in improving water use efficiency;
- enable NR&M to more accurately manage the resource;

- approve trades, mid water year;
- contribute to NR&M's monitoring of Water Resource Plans (WRPs) and Resource Operations Plans (ROPSs) and their progress in meeting environmental and security objectives.

Data that is available for other authorisations will be subject to inaccuracies arising from inconsistencies in meter installation and maintenance.

General community

Benefits—

Areas where the bulk of authorisations are water licences would continue to be metered and the resource managed, albeit within the constraints of the data accuracy.

Costs—

In an environment where there is so much concern about salinity damage, over-allocated water supply and the establishment of environmental flows, it is appropriate that resource management practices are introduced to prevent further environmental damage and community anxiety. The non-introduction of meters for water extraction of water allocations and statutory authorisations would lead to ineffective resource management practices for water and could jeopardise the sustainable use of the community's water resource and ultimately lead to the potential loss of regional jobs dependent on the irrigation sector.

This "Do nothing" scenario will now be compared with the two alternatives including the user owning and managing the water meters and the State Government using and managing the water meters in the qualitative impact assessment.

Alternative 1—user owns and manages water meters

Rural stakeholders (largely irrigators)

Benefits—

Water users would be required to comply with NR&M specifications regarding meter type and installation requirements, however, the user would ultimately own the meter. Under these arrangements, less

people (e.g. metering contractors) would be entering the water users property to undertake metering related activities.

Costs—

Users would still be required to pay the cost of meter purchase and installation. In addition, they would not be getting an operational meter for a prescribed time. If the users 'new' meter fails, they will be required to negotiate with the manufacturer or pay the cost of replacement. Users would not benefit from economies of scale as provided by a departmentally operated process.

Users would also be required to cover the compliance costs of ensuring meters are installed and maintained according to departmental and National Standards.

Water user ownership and management of meters may (as previously experienced) give rise to inconsistencies in types of meters, standards of installation and levels of maintenance (and therefore accuracy). This can mean data is of limited use and accuracy. Inaccurate data will impede the State's capacity to effectively manage water resources. This will impose costs on irrigators in the form of reduced security of supply and resource sustainability.

State government

Benefits—

The State would not have to carry the risk of financing the metering project and collecting charges from users for the purchase and installation of meters.

Costs—

Costs associated with not collecting accurate water use data include—

- inability to provide users with security of supply;
- limited ability to achieve Water Resource Plan water allocation security and environmental flow objectives;
- inability to facilitate accurate water trading arrangements (so that users can be assured of the actual volume they are purchasing for the remainder of a water year); and
- inability to take action against users that 'steal' water;

- delays in gaining economic benefits from water reform; and
- higher costs in reversing resource degradation.

General community

Benefits—

Nil identified.

Costs—

The extension of non-standardised, adhoc metering practices resulting in inaccurate data collection would lead to ineffective resource management practices for water and could jeopardise the sustainable use of the community's water resource.

Summary of alternative 1—user owns and manages water meters

As the following summary table illustrates, the stakeholders groups including irrigators, State Government and the general community will all experience a net loss from Alternative 1. The costs to these groups outweigh the net benefits, which will occur to the stakeholder groups of irrigators, Government and the general community. Overall Queensland society will be worse off with this form of Regulation than having no regulation with an overall H- High Negative costs.

Stakeholder	Predicted impact
Irrigator	M-
State Government	H-
General Community	H-
Overall assessment	**H-**

Alternative 2—proposed legislation—State owns and manages water meters

Rural stakeholders (largely irrigators)

Costs—

The proposed Regulation would involve an annual metering service charge as well as a site preparation cost. The annual metering service charge is estimated to cost irrigators (approximately) between $370 and $900 per meter (per year). This charge would cover costs incurred by NR&M in providing the meter service and the estimate is based on the full range of meter sizes (very small to very large) and a combination of meter types (mechanical and non-mechanical). Costs would be based on individual projects areas and would reflect the following activities—site assessment, purchase, installation, borrowing costs, reading, maintenance and administration.

While the short-term benefits of metering for irrigators may not look as significant as the costs, the long-term benefits of sustainable resource management, enhanced security of supply and access to water trading opportunities will be considerable.

Benefits—

State owned and managed metering would provide reliable water use data, which would contribute to—

- ability to provide users with security of supply;
- ability to achieve Water Resource Plan water allocation security and environmental flow objectives;
- ability to facilitate accurate water trading arrangements (so that users can be assured of the actual volume they are purchasing for the remainder of a water year); and
- ability to take action against users that "steal" water.

In addition, State owned meters would absolve the water user from responsibility associated with owning and maintaining the meter. NR&M would be responsible for the site assessment, purchase, installation, reading and maintenance of each unsupplemented water meter as part of a metering service that extends for the life of the meter. Consequently, the user would receive an operational meter for a prescribed time, and the State would be responsible for repairing or replacing any dysfunctional meters.

By implementing meters in a standardised manner across the state, the government aims to achieve efficiencies in cost for both the water user and the government. In addition there will be reduced audit costs to pass on to the water user arising from meter installation compliance activities.

Given that metering is part of an overall package which includes the grant of a secure and tradable asset - a water allocation, the overall effect of the proposed Regulation on this stakeholder group is estimated as a long term medium positive impact (M+). However, it is acknowledged that in the short term there will be a medium negative impact (M-).

State government

Costs—

The state would have to carry the risk of financing the metering project and collecting charges from users for the purchase and installation of meters.

Benefits—

There will be reliable new information on water use from all relevant areas for the government to—

- Monitor water use and compliance with water entitlements;
- Provide information necessary to assist farmers in improving water use efficiency;
- Provide information to enable NR&M to more accurately manage the resource; and
- Provide information that will contribute to NR&M'ss monitoring of Water Resource Plans (WRPs) and Resource Operations Plans (ROPSs) and their progress in meeting environmental and security objectives.

The government will be able to upgrade with new technology as required to achieve cost savings and meet new data requirements.

The government will also be able to more easily ensure compliance with National Standards developed by the National Measurement Institute.

The overall effect of the proposed Regulation on this stakeholder is estimated as (H+) High Positive Impact.

General community

Costs—

Nil

Benefits—

The accurate collection of water use data, arising from State owned and managed water meters will benefit the general community in the following ways—

- allow for more effective use of the water and ensure future supplies for the community, industry and environmental needs;
- prevent further environmental damage and community anxiety;
- allow for effective resource management practices for water and the sustainable use of the community's water resource, and
- generate regional jobs due to increased economic activity as result of the introduction of more meters on farm.

The overall effect of the proposed Regulation on this stakeholder is estimated as (H+) High Positive Impact.

Summary of alternative 2—proposed legislation—State owns and manages water meters

As the following summary table illustrates, the stakeholders groups including irrigators, State government and the general community will all experience a net benefit from Alternative 2. The benefits to these groups outweigh the net costs which will occur to the stakeholder groups of irrigators, government and the general community. Overall Queensland society will be better off with this form of regulation than having no regulation with an overall H+ High Positive Benefit.

Stakeholder	**Predicted impact**
Irrigator	M- (Short-term) M+ (Long-term)
State Government	H+
General Community	H+
Overall assessment	**H+**

Conclusion

The above qualitative assessment shown in the table below clearly indicates that there are substantial benefits to the State from the proposed Regulation, alternative 2, the option that proposes State ownership and management of water meters. The net benefits from accurately knowing the water usage for crop use and for trading clearly outweigh the present system of non-standardised meter installation and the alternative 1 option of water user owned and managed water meters.

Stakeholder	**Alternative 1**	**Alternative 2**
Irrigator	M -	M+ (average impact)
State Government	H -	H+
General Community	H -	H+
Overall assessment	**H -**	**H+**

ENDNOTES

1 Laid before the Legislative Assembly on . . .

2 The administering agency is the Department of Natural Resources and Mines.