

## **QCA development of irrigation prices for SunWater schemes - Key issues as at 18<sup>th</sup> June 2010**

The Qld Government has directed the Qld Competition Authority (QCA) to develop irrigation prices for SunWater water supply schemes for the period July 2011 to June 2016.

### **What are the limitations of the Governments brief to QCA?**

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.

The Government's brief to the QCA precludes most of these issues being considered as part of the price development process.

### **What will QCA address?**

QCA will be undertaking consultation in all schemes during April and May to identify issues that warrant investigation within the limits of the brief defined by the Qld Government. QCA currently intends to develop issues papers dealing with the following issues:

1. Form of regulation
2. Tariff structure
3. Capital cost allocation
4. Rate of return on assets
5. Asset consumption
6. Capacity to pay
7. Pricing principles for dam spillway upgrades

If you require further information go to the QCA website at <http://www.qca.org.au/water/sun-irrig-price/>

## **Issues identified from first round of consultations**

Irrigation schemes raised a range of issues during the first round of consultations conducted by QCA in each scheme over May. The QFF pricing group has developed the following outline of issues compiled under the topics QCA intends to address in the coming month.

### **1. Form of regulation**

- a. Sunwater customers face significant risk in meeting the high fixed costs of water supply in schemes where water supply is variable and difficult to forecast within seasons and from season to season. Pricing reform needs to reflect this risk which also varies considerably from scheme to scheme. The State Government decision to rebate Part A tariffs during the last drought reflected the impact of this risk.
- b. What level of risk does SunWater face? SunWater is a monopoly supplier in each scheme and a spread of schemes across the state to help the provider manage risks of water supply variability and high fixed costs in individual schemes? Also SunWater's fixed costs are on average covered by part A charges and customer quarterly payments of tariffs are generally assured. SunWater is also regionalising and centralising management of schemes leaving customers to cope with risks of a local nature. SunWater faces minimal risk in managing irrigation schemes across the state.
- c. How will pricing regulation encourage SunWater to invest in the efficiency and sustainability of schemes? Past investment decisions have resulted in a significant number of poorly functioning schemes e.g. inadequate pumping systems, undersized channels, poorly constructed and leaking channels, poor environmental management infrastructure. How can the high costs of achieving efficiency and sustainability improvements in schemes be met?
- d. Can the pricing structure encourage customers to improve water use efficiency on farm despite the impediments imposed by scheme supply arrangements?
- e. How can pricing reforms encourage SunWater to achieve savings in operating costs?
- f. How can significant environmental and other risks faced in managing schemes be efficiently managed?
- g. For the last price path schemes were able to choose between a price cap and a revenue cap. Most schemes selected a price cap which involved setting fixed prices for the 5 year term with total charges paid dependent on the volumes of water sold. Three schemes chose to set annual revenues for the price path irrespective of irrigation water use. Should schemes have a similar choice this time?
- h. Will the form of regulation deliver price paths that significantly distort signals to customers re the current and future cost of providing water services?
- i. Is there sufficient information available on SunWater schemes to assess the costs of managing each scheme and to develop efficient prices?
- j. Has sufficient time been allowed to develop price paths and engage customers in each scheme?
- k. Will the form of regulation deliver water prices that are competitive with other states. Qld irrigation industries have to compete with interstate particularly NSW that does not have to pay a rate of return on past scheme investments in their water charges. Will the QCA approach to assessing prices for each scheme deliver an outcome that is consistent with the

approach adopted in other states and with the National Water Initiative Pricing Principles recently approved by COAG?

## 2. *Tariff structure*

- a. *Two part tariffs* - Current tariffs in most schemes allow for a fixed charge to recover 70% of SunWater's fixed costs and 30% through a variable charge but this approach was varied for a limited number of schemes.
  - What are the implications of this tariff structure for extended periods of low or no supply? Paying high Part A charges on water which is not available for use particularly over extended periods of drought is untenable.
  - Is this tariff split likely to encourage schemes with a low usage rate to improve?
  - Would a lower Part A encourage water use efficiency gains particularly in schemes with high water reliability and use?
  - What impact would higher Part A tariffs have on schemes?
- b. *Differential pricing* – Assessing prices to address differences in the cost of supplying water in different parts of schemes will be a significant issue for channel irrigation schemes such as Bundaberg. Issues that must be considered in any investigation include:
  - Is the decision to investigate and implement differential pricing one for growers in each scheme or for QCA?
  - Differential pricing should not just be assessed only on the basis of the cost of power in supplying water in different parts of schemes. All key cost items need to be assessed including rate of return on dams, electricity, maintenance, weed control, delivery losses and any other costs that significantly vary between segments.
  - Differential pricing should be assessed in accordance with a consistent approach for all schemes where segmentation is an issue. These assessments would have to consider if cost differences were material within each scheme to decide whether it was feasible to apply differential pricing eg assess whether differential pricing would result in stranded assets, growers going out of business, land going out of production, average cost of water for remaining growers increasing.
  - Differential pricing assessments should take into account poor decisions made in developing the scheme in the past eg was it the best option to supply a scheme segment from an instream dam, are river pumps, channels and piping located in the best position to supply a scheme segment?
  - The information available on the costs of supply water to different parts of the irrigation scheme must be adequate to allow accurate assessments of segment costs.
  - Consideration needs to be given to the implications of paying high Part A tariffs for water that is not received in scheme segments that have significantly different announced allocations throughout a season from other segments. To address the inequity it may be appropriate to pay Part A on water supplied each quarter provided there are increases in Part A to make up revenue.
- c. *Indexation* - Current prices were escalated each year by the Consumer Price Index. What are the implications of indexing prices to reflect cost increases say in items such as electricity?
- d. *Water use forecasts* – Schemes need to be able to review water use forecasts for the current price paths with updated historical use estimates to recommend water use forecasts for the new five year price path. The impediments to using alternatives to historic use forecasting

- need to be considered on a scheme by scheme basis. Consideration should also be given to variations in usage between different industries.
- e. *Drainage rates* – For the current price paths schemes had the opportunity to choose whether drainage rates were levied separately or included as part of the tariff. Drainage charges in schemes need to be reviewed as not all customers need drainage services because they now trap all farm runoff. Is the overall drainage structure/capacity suited to current needs?
  - f. *Environmental management* – Significant upgrades to meet environmental management standards in schemes will need to be externally funded in schemes required to cover increases in operating costs and possibly a rate of return. The same would apply to scheme upgrades required to meet changed resource operations plan requirements. Management of issues such as weed infestations may also require special funding
  - g. *Workplace health and safety* - Significant upgrades of workplace health and safety standards in schemes needs to be externally funded.
  - h. *Groundwater management* - Significant investments to improve groundwater management in schemes needs to be externally funded eg costly channel lining
  - i. *Other charges* - What account will be taken of other water charges not included in A or B Part Tariffs? The revenue from these charges needs to be taken into account.
  - j. *Free water allocations* – SunWater is required to deliver water to certain customers in some schemes at no charge. The State Government should meet the capital and operating costs attributable to these allocations.
  - k. *Recreation costs* – Current prices to irrigators cover the cost of providing and maintaining recreational facilities at storages. These costs should be recovered from the communities that benefit from the use of these facilities.
  - l. *Channel water harvesting charges* – Some channel schemes have charges applied to water harvesting. Are there any issues regarding how these charges should be treated?
  - m. *Hobby farms and other stock and domestic customers* – Are the minimum costs of connecting these small customers sufficient to cover the cost of making these connections
  - n. *Competitive tariffs* – Will resulting tariffs be competitive with tariffs in other states.
  - o. *Consistency of tariff structures across schemes* – Are there other consistency issues other than approach to differential pricing.
  - p. *Disaggregation of channel and bulk charges* – are there any issues that schemes have identified?

### 3. Capital cost allocation

- a. *Consistency with other jurisdictions* – NSW has sunk legacy costs as at 1997 how will the approach adopted for SunWater schemes deliver a consistent and competitive outcome.
- b. *Purchase of water entitlements* – Supplemented water entitlements are the result of headworks and therefore the purchase of these entitlements are shares of the headworks and associated infrastructure
- c. *Beneficiaries of headworks* – Beneficiaries of headworks need to be determined as a basis for allocating capital costs
  - Irrigation users
  - Towns (supply and recreation)
  - Mines
  - State Government – indirect benefits such royalties from mining development, other tax benefits

Pre-existing riparian rights of access will not benefit from headworks investments.

- d. *Utilisation of headworks* – The utilisation of headworks for irrigation needs to address the following:
- What are headworks – dams and regulating weirs. Channels, pipelines, siphons, pumps, balancing storages and diversion weirs/channels are distribution works and must be separated as Government policy dictates that these assets have a zero value.
  - Entitlement share for headworks – nominal entitlements supplied by headworks for irrigation, urban and industrial use
  - Reliability of entitlements – taking into account sharing between high and medium priority, cut offs for irrigation access, historical performance of the scheme focussing on impacts of periods of failure and dependence on flow events (credit water arrangements)
  - Comparisons should be made with assessments of the long term hydrologic performance of the scheme if all entitlements were to be converted to high reliability.
- e. QCA wants to review approaches to valuing assets such as the deprival value endorsed by COAG. It is expected that this issue will be covered in a paper to be released by QCA for response.
- f. How will investments in headworks for flood mitigation be deducted from asset valuations?
- g. Will capital contributions be deducted from the value of headworks assets? What information will be required to assess these requirements?

#### **4. Rate of return on assets**

- a. QCA has been asked to investigate a rate of return on the value of scheme assets required for bulk water supply. Channel systems are to be valued at zero. All schemes have voiced their opposition to the imposition of any rate of return on SunWater assets on the following grounds:
- SunWater as a monopoly supplier is a significantly low risk enterprise so a rate of return is not justified.
  - Purchase of land and water entitlements in many schemes has already compensated the State Government for the capital costs of establishing these schemes
  - Capitalised value of water entitlements has an impact on farmers borrowing levels. Higher tariffs means lower capital value/equity and reduced financial security
  - Irrigators seek a definition of new assets which would attract a full return on capital e.g. is replacing meters with improved technology a capital cost? How would bulk metering, total channel control and channel lining investments be treated?
- b. SunWater's business is risk free and any rate of return should reflect this. Part A charges cover fixed costs. Even for customers who cannot pay and go bankrupt, banks do not want water taken away from farms by non payment. Banks will pay water charges since without water the capital value of the farm would fall significantly. The renewals annuity completely takes away risk from Sunwater.

#### **5. Asset consumption**

- a. QCA proposes to investigate whether a renewals annuity or a regulatory depreciation allowance should be applied for pricing purposes. The current price path is based on a renewals annuity approach which growers support as it has worked well in most cases. However, procedures need to be put in place to ensure that any cost overruns by Sunwater are approved by customers. Where procedures are not adhered to the cost overruns should not be recovered through increased water charges on customers.

- b. Renewals annuity is a revenue cap which takes away any Sunwater risk re capital refurbishment.
- c. With distribution assets having zero value there can't be a depreciation charge so renewals must be used. Can there be renewals for distribution and depreciation charge for dams? There can't be both a renewals and depreciation charge for dams
- d. If growers are prepared to accept payment for a renewals annuity and thereby bear the risk involved why apply a rate of return as a proxy for renewals as this shifts risk to SunWater and as a result will increase prices?
- e. Compliance with resource operations plan conditions which require for example upgrades to scheme outlets to allow passing of environmental flows must be treated as a renewal not a new investment.
- f. Scheme investments required to comply with new workplace health and safety conditions must be treated as a renewal not a new investment.

## 6. Capacity to pay

- a. There is significant concern across all schemes about the conduct of an assessment of capacity to pay approach for the following reasons:
  - There will not be sufficient time to undertake an adequate assessment of capacity to pay per scheme which would need to survey a defined percentage of customers in each industry in each channel and river scheme. This analysis would have to be updated for each 5 year price path over the proposed 15 year term.
  - It is unclear what the basis for assessment of the capacity to pay would be. For example will it be based on the top or the bottom performing segment of industries in each scheme or an average of performance across industries?
  - How will differences in data availability from scheme to scheme be addressed in adopting a consistent approach to assessing capacity to pay
  - Schemes will face difficulty achieving lower bound prices without looking a a capacity to pay a rate of return
  - Agriculture usually achieves a 0 to 2 % rate of return so there is no capacity to pay. Only if rate of return for growers is above interest rates should growers start paying SunWater rate of return.
  - Irrigation customers already pay rate of return on electricity so no capacity to pay more since electricity is half water costs.
- b. Comments in regard to capacity to pay for cane schemes addressed the following issues:
  - Sugar industry in Queensland has contracted from 36mt in 2005 to 28mt in 2009 due to unprofitable sugar prices and the cane area has fallen by a similar amount. This 22% fall in production in 4 years clearly indicates that the sugar industry does not have capacity to pay more for water in fact it cannot afford current prices.
  - In 2007/8 the average cane grower in Queensland lost around \$60,000 according to an ABARE survey and this included a very modest payment of \$30,000 for growers own labour. If a more realistic figure of own labour of \$60,000 per year was used, the average loss would be \$90,000.
  - Even though sugar prices are higher now than in 2007/8, costs have risen considerably during this time. According to ABARE the price of sugar averaged 14.0USc/lb in 2007/8 and they did spike briefly at almost 30USc/lb early in 2010. However, prices have fallen again and are back to around 15-16USc/lb currently. In 2014/15 ABARE has forecast prices to fall to 11.7USc/lb which is well below where they were in 2007/8 when the

average cane grower was losing at least \$60,000. Consequently, it is unlikely that the average cane grower will be making a profit on average over the 5 year price path according to ABARE data.

- In low sugar price years, growers reduce irrigation further because it is uneconomic to apply water since the marginal costs outweigh the benefits. This is with 70% of costs of water in Part A which you pay regardless of use.
  - If prices increase, water use and cane production will fall further and mills will shut. Negative economic consequences at farm gate, mill and town need to be taken into account when considering increasing prices
  - Growers in tablelands continually struggling to find profitable crops to grow and going bust in many, clearly there is no capacity to pay more for water
  - Around 20% of cane growing costs are water and electricity charges and there is a very limited capacity to pay more.
- c. Comments in regard to capacity to pay in other schemes are being sought.

## **7. Pricing principles for dam spillway upgrades**

- a. Why are spillway upgrades needed?
- b. The key beneficiaries from spillway upgrades are urban users so the costs should be allocated accordingly. These upgrades are not being undertaken for the benefit of irrigators so they should not pay for any of these costs.
- c. QCA should also outline how the benefits and costs of these upgrades are to be apportioned between different beneficiaries.

## **8. Other issues**

- a. Assessing efficient costs
  - A full productivity and efficiency review of SunWater was conducted for the development of the current price path because an alternative approach to benchmark SunWater against similar organisations was rejected as it would not assess how efficient SunWater actually was. Will QCA conduct a fully transparent efficiency assessment at least comparable to that undertaken for the current price paths? Will such an analysis include all aspects of SunWater's assets and operations and provide a basis for comprehensive performance reporting which could be the basis for defining appropriate levels of service for individual schemes?
  - Will SunWater consult with each scheme advisory committee to prepare network service plans and document efficient operating costs? To what degree will these plans address scheme based efficiency issues including such issues as impediments in schemes to making efficiency gains?
- b. Scheme information/reporting
  - Will scheme information be adequate to assess critical issues such as scheme segmentation, separation of irrigation costs from urban and other industry costs?
  - Will the analysis trap all forms/sources of scheme revenues?
  - Is scheme information up to date/correct?
  - What level of reporting will QCA make widely available on scheme costs and analysis of critical issues? Will SunWater be required to report annually on costs over the price path period?

QFF will further develop this list of issues as necessary and use it to prepare responses to the issues papers to be released by QCA on each of the listed topics.