



# Pioneer Valley Water Co-operative Limited.

A co-operative formed under the *Cooperatives Act 1997*.

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Queensland Competition Authority  
GPO Box 2257  
BRISBANE QLD 4001

Dear Sirs

## **RE: SunWater Network Service Plan – Pioneer River Water Supply Scheme**

This submission addresses the Network Service Plan (NSP) prepared by SunWater for the Pioneer River Water Supply Scheme as part of the review by Queensland Competition Authority of irrigation water pricing for SunWater Schemes.

### **General Comments**

#### *NSP content*

The NSP is deficient in that it does not present SunWater's proposed water charges for the scheme. This detail is the single expectation of customers for the new price path negotiations and it is left to customers to convert SunWater's proposed costs into per megalitre numbers. Further the document makes no reference to actual operating costs for the present price path other than to state that bulk water operating costs have averaged \$846,000 per annum over the period. Also missing is the detailed breakdown of the proposed operating costs by activity or type.

Table 1 provides the cost comparison with the present price path that is missing from the NSP.

**Table 1 – NSP cost comparison with 2006-2011 Price Path**

	<b>NSP costs</b>	<b>2006-2011 Price Path approx efficient costs</b>
Operating cost	61% of \$912,000 <b>\$556,320</b>	<b>\$450,000</b>
Renewals annuity	44% of \$817,000 <b>\$359,480</b>	<b>\$192,000</b>
Total	<b>\$915,800</b>	<b>\$642,000</b>

*06-11 costs from "Synergies – Report: Rural Water Pricing Business & Scheme – Overview (Jan10)"*

Table 1 shows an increase of some 43% for the SunWater operating costs to be met by irrigators for the Pioneer River Scheme from that adopted for the 2006 to 2011 price path.

Based on the proposed NSP assumptions of 40% forecast usage for the scheme and adopting the 2006-2011 price path 70/30 tariff split has water charges compared to the present path as shown in Table 2. These are based on 47,357 ML of irrigation allocation in the scheme.

**Table 2 – NSP charges comparison with 2006 – 2011 Price Path**

	<b>NSP (2011/12)</b>	<b>2010/11 (present path)</b>
Part A	\$13.50/ML	\$10.21/ML
Part B	\$14.50/ML	\$7.96/ML
<b>Total</b>	<b>\$28.00/ML</b>	<b>\$18.17/ML</b>

These are increases of \$3.29/ML (32%) for Part A and \$6.54/ML (82%) for Part B bulk water charges for the first year of the new price path.

#### Mirani Weir Costs

A further major discrepancy in the NSP is in regard to the treatment of Mirani Weir in conjunction with the adjoining Eton Water Supply Scheme. Mirani Weir on the Pioneer River has a dual function. It provides in stream storage for the Pioneer River Water Supply Scheme and is also a pumping pool for Mirani Pump Station for diversion into Kinchant Dam and the Eton Water Supply Scheme. Examination of the Pioneer NSP indicates that all Mirani Weir costs have been included in the Pioneer Scheme. Review of the Eton NSP confirms this with the following statement – “Appendix A.1.1 – Note that the Mirani Weir is not part of the Eton Scheme, being a Pioneer River WSS asset”.

Mirani Weir was constructed in 1987 as an integral part of the Eton Irrigation Scheme. An additional outcome from the weir was an increase in the regulated supplies for irrigation and urban water downstream in the Pioneer River. Without the ponded pool upstream of the weir structure, pumping into Kinchant Dam would only be possible in very high flow events. Mirani Pump Station is not normally operated during high flow events due to the sediment and debris load in the river at those flows. Blockage of intakes and/or pump damage could occur if operated during these events.

Operating and renewals costs in the NSP for Mirani Weir should be shared between the Pioneer River and Eton Water Supply Schemes

#### Mirani Diversion Channel

Although the Mirani Diversion Channel is principally used to carry water pumped from the Pioneer River to Kinchant Dam, farms that the channel traverses were provided with outlets from the channel to draw irrigation water directly. When the Teemburra Dam component of the Pioneer Valley WSS commenced these farms were granted water allocations from the Pioneer River WSS to be supplied through the Mirani Diversion Channel under arrangements with SunWater. SunWater incurs significant water losses through the channel and Pioneer River WSS irrigators are concerned that SunWater may seek to deduct losses from their individual water allocations to cover their losses. The NSP should confirm that distribution losses will not be deducted from water allocations held by Pioneer River WSS irrigators supplied from the Mirani Diversion Channel

## **Pioneer NSP Specific Comments**

### Section 2 – Bulk Water Services

There are no service targets and hence no reports against service targets for the Pioneer River WSS. This is confirmed by reference to the Synergies Report: Rural Water Pricing Business & Scheme – Overview (Jan10) and on the SunWater website under Scheme Information.

Bulk water contracts in the Pioneer River WSS are between SunWater as the Resource Operations Licence (ROL) holder and individual irrigators as water allocation holders. However irrigators have their water allocations supplied and managed by the Distribution Operations Licence (DOL) holder, Pioneer Valley Water Board (PVWater). The ROL contract is a legislated instrument under the Water Act 2000 and SunWater's principal role is to provide evidence of the existence of a ROL contract so that water allocation permanent transfers can be registered on the Water Allocation Register.

All other matters in regard to water allocations are dealt with between PVWater and irrigators. The NSP mentions an Agency Agreement between SunWater and PVWater which covers supply arrangements to irrigators as per the ROL contracts. This Agreement was signed in 2006 and was the subject to renegotiation following amendments to the Pioneer Valley Resource Operations Plan in 2007. The amendments related to management of low natural flows in the system. SunWater have to date not accepted proposals from PVWater in this matter and the Agreement could at best be classed as "in limbo" at this point in time.

### Section 3 – Customer Service Standards

As discussed briefly in Section 2, SunWater does not deal directly with irrigators in the Pioneer River WSS other than for permanent trade of water allocation. Under the ROL/DOL arrangements all day to day water supply matters are handled by PVWater. The following points are relevant when considering this section the NSP.

- SunWater's annual report against service standards covers 21 of the 22 Schemes. Pioneer River WSS is not reported on in the SunWater annual report, directly to PVWater or to irrigators.
- PVWater collates water orders through its system and provides SunWater with required flows at key points in the system to meet demand. SunWater does not process any individual irrigator water orders.
- SunWater does not read irrigation meters.
- SunWater issues one invoice only (to PVWater) for irrigation. PVWater bills irrigators and manages irrigator accounts.
- SunWater trading procedures and standards are not relevant as all temporary trades of water allocations are managed by PVWater
- In regard to information provision and reporting, SunWater does not meet periodically with customers. Most contact with SunWater is issue or incident based. Customers would have a much better appreciation of scheme operations if there was some formal information provision by SunWater.
- Comments in regard to water delivery, connections and disconnections are irrelevant as supply to irrigation customers is under the DOL held by PVWater.

The comments above and further comments on Section 4 of the NSP demonstrate that the Pioneer River WSS should not be apportioned the same level of administration and overheads costs as other schemes. This is on the basis that most irrigation customer related activities in the scheme as detailed in the NSP are performed by PVWater and not SunWater.

#### Section 4 Bulk Water Service Costs

This section of the NSP would be expected to provide the specific costs for the scheme at a broken down level to allow for full assessment of efficient costing. The bottom-up approach that SunWater suggests has been adopted appears to be by word only. Descriptions of operating activities in Section 4.1 are totally inadequate to justify the approach. The detailed work instructions and operational manuals should be provided by SunWater as the first step to justification of the proposed costs.

It is not accepted that specialist operational staff provided centrally and shared across all schemes is the most cost efficient method of sourcing those specialist services. The private sector can provide those specialist services at most scheme locations. This would be on a needs basis as required and would truly reflect the cost of the specialist services at a scheme based level.

The following comments on Sections 4.1.2 to 4.1.6 of the NSP build further on the discussion in Section 3 in regard to PVWater performing most service delivery functions for irrigation in the Pioneer River WSS. This reinforces our position that the Pioneer River WSS should not be apportioned the same level of service delivery costs as other schemes.

##### *Water delivery*

Approximately half of the water supplied in the system comes from natural flows with supplementation from storages only at times when natural flow recedes. There are two outlets from Teemburra Dam – main dam to the Pioneer River and saddle dam 2 to Cattle Creek. Transmission losses are very high below the main Teemburra Dam outlet and limited releases only are made from this outlet to supply irrigators to the junction with Cattle Creek. The Palm Tree Creek outlet from Teemburra Dam into Cattle Creek is the major release point into the Pioneer River WSS when natural flows no longer meet demand. Releases through the Palm Tree Creek outlet cannot be scheduled as the outlet cannot be regulated due to failure of the regulating valve. Releases are made at a fixed discharge capacity of 100 megalitres per day regardless of downstream demand.

With SunWater's fixed release capacity PVWater, through close management of its pumping stations drawing from the system extends as long as possible the use of natural flows prior to the fixed release from Teemburra Dam commencing. This is to minimise losses from the system as the fixed release may exceed demand. Once the release commences through the Palm Tree Creek outlet the only decision then required from SunWater is when to close following a natural flow event. Under the above arrangements and until such time as the Palm Tree Creek outlet is rectified it is contended that scheduling and releasing of bulk water in the Pioneer River WSS is a minor activity for SunWater compared to other storages.

In regard to meter reading, PVWater reads some 400 irrigation meters quarterly. SunWater's other six customers are urban or industrial water users who it is understood supply their meter readings.

##### *Customer service and account management*

As discussed previously, the only function performed by SunWater for irrigation in the Pioneer River WSS in this area is for water allocation sales and the quarterly invoicing of PVWater for all irrigation water in the scheme.

### *Compliance – ROP amendments and modifications*

The Pioneer Valley ROP commenced in 2005 and was subject to an amendment in 2007 to include critical water sharing rules. Rather than actively assisting customers during these processes SunWater chose to adopt a commercial in confidence approach to its submissions to the regulator and conducted very limited consultation with customers. It is accepted that SunWater must participate in any water planning activities but with Water Resource Plans on a ten year cycle and ROP's amended very infrequently funding should be on a needs basis rather than long term funding of a central group in SunWater.

### *Compliance - Water accounting*

All monitoring of customer's use against water allocation and maintaining customer's water accounts is done by PVWater under the DOL with bulk reporting to SunWater by PVWater.

### *Compliance – Water quality monitoring*

PVWater is not aware of water quality monitoring that is stated to be done for Teemburra Dam and Marian Weir inflows.

### *Compliance – Environmental management*

This explanation would benefit if there was discussion on the specific environmental risks for Pioneer River WSS. Has a scheme level risk assessment been undertaken as part of the development of the central specialist group for environmental management?

### *Compliance – Land management*

This discussion would benefit from inclusion of the full property description (Lot on Plan) for all land owned by SunWater in the scheme. This would also assist in understanding the land value on 1 July 2010 shown in Appendix A.2 of the NSP of \$5,157,031.

### *Compliance - Insurance*

Details are required here of the specific assets in the Pioneer River WSS that are covered by insurance and how the \$90,000 annual premium is apportioned to the various insurance policies for the scheme.

### Section 4.2 - Operating costs

The description of how the operating costs have been developed is quite good but unfortunately it means nothing unless the "bottom up" detail is also provided to confirm the requirements for expenditure by activity and type in Tables 4-2 and 4-3.

The following comments are provided on Table 4-2.

- Corrective maintenance forecasts are stated to be based on past experience. Details of the past experience are required to allow a clear understanding of the unexpected failures that could occur in this scheme and require an annual amount of \$185,000. This amount appears excessive for a bulk water scheme.
- Renewals annuity spend for the period 2007 to 2011 is stated as \$6,936,000. This is a very large spend and requires full details to ensure that the expenditure is for renewal of assets and not for works more appropriately classed as maintenance.

A major component of the renewals is understood to be related to the Palm Tree Creek Pipeline and Outlet from Teemburra Dam. The variable discharge cone valve for the Palm Tree Creek Outlet failed some three years after the dam was completed. A further cone valve fitted to the outlet has also failed. Clarification is sought of how SunWater is funding the repair attempts of this outlet valve and of the eventual rectification of the matter. Funding of this work totally from renewal funds for the Pioneer River WSS is not appropriate as it is considered to be rectification of the failure of very new infrastructure having been initially installed in 1996.

Of further concern with the renewals spend through the present price path is that it has occurred without any formal notification to customers by SunWater of the significant expenditures proposed outside of that understood to be included in the 2006 to 2011 price path.

- Dam safety upgrade although now excluded from this pricing review is stated to occur for the Pioneer River WSS in 2015 and 2016. Clarification of this is sought as it was understood that upgrade of Teemburra Dam was not required until much later.

The following comments are provided on Table 4-3.

- Detailed break-down of labour expenditure from the bottom up approach is required.
- Indirects and overhead comprise 52% of the total operating costs. As a bare minimum, split of this line item into separate indirect and overhead costs with the break-down between central and regional offices components is required.

#### *Allocating operating costs*

As discussed previously the NSP proposed operating costs do not recognise that PVWater manages a major portion of service delivery and water allocation management for irrigation in the Pioneer River WSS.

The proposal to allocate operating costs on the basis of total allocation is not supported. The previous price path negotiations adopted hydrologic conversion factors for sharing of costs between water allocation groups. These factors are developed from the same models used to set water sharing rules for schemes. They are considered to be more appropriate for sharing operating costs but have not been calculated for the Pioneer ROP at this time. With hydrologic conversion factors not widely available it is contended that SunWater's proposed Headworks Utilisation Factors methodology should also be adopted for allocation of operating costs.

#### *Projected water use*

There is no explanation in this section or section 2 of the NSP as to the logic behind adoption of an 8 year period for assessing historic average water use. In the Pioneer WSS the last four years have seen average and above rainfalls which have provided the major component of crop water demand and reduced irrigation water use. The previous three years were dry periods with low storage in headworks resulting in announced allocations at the commencement of the years at 30%, 0% and 63% respectively. Again this was a severe impediment to water use for irrigation during these years with little or no announced allocation available. The use of historic water use data for forecasting must take into consideration all factors relevant to actual water use by irrigators in previous years. A ten year period which aligns with the last two price path periods is considered to be more appropriate for assessing historic use.

In a supplementary irrigation water supply scheme such as the Pioneer River WSS irrigation is to meet the difference between crop water demand and effective rainfall. Consequently demand is set principally by seasonal conditions of which neither customers or SunWater have any control. Surely this presents an avenue for a water service provider and its customers to work cooperatively with modern technology to undertake forecasting of demand. This could lead to an agreed level of risk sharing that is incorporated into pricing structures.

#### *Section 4.3 - Renewals*

As discussed previously the major component of renewals appears to be related to the Palm Tree Creek Pipeline and Outlet. The outlet has not operated as designed since Teemburra Dam was completed in 1996 and the question is asked as to the validity of including rectification of the outlet as renewals.

Missing in this section is any discussion on the fabridams on Mirani and Dumbleton Weirs which have been deflated since 2008 but had been identified prior to this as being in a very poor state – particularly the Dumbleton Weir fabridam. It is accepted that any final decision on these fabridams is subject to the outcomes of the Bedford Weir fabridam collapse investigations. However the matter should be mentioned in the NSP discussion on renewals.

As discussed in our comments on operating costs, there is insufficient detail provided in this section on renewals to accept that the expenditures proposed are realistic. The following specific comments and questions apply to Table 4-5 and Figure 4-1.

- Is the five yearly Teemburra Dam safety inspection correctly included as renewals?
- How does the proposed expenditure of \$231,000 for dam safety inspection for Teemburra Dam compare with the actual cost for the dam safety inspection completed in 2010?
- What are the major cost components of the proposed \$231,000 dam safety inspection in 2016?
- Details should be provided for the proposed annual expenditures for each facility.
- Description of items in the 25 year renewals profile requires much more specific detail to justify amounts such as \$377,000 for control equipment and pipework and \$410,000 for fishlock hydraulics.
- Detailed costs should be provided for all years not just 2023.
- Renewals costs for Mirani Weir should be shared between the Pioneer River WSS and the Eton WSS.

*Renewals annuity*

The opening balance for the renewals annuity for the Pioneer River WSS at 1<sup>st</sup> July 2011 is stated at negative \$5,160,000 due to the annuity spend over the last price path of almost \$7 million as discussed in the comments on Table 4-2. This balance requires clear and transparent explanation from SunWater as it has a significant impact on the required annuity for the new price path.

*Allocating the renewals annuity*

While generally in support of the methodology adopted through Headworks Utilisation Factors (HUF) PVWater has been unable to reconcile the calculation presented by SunWater for the Pioneer River WSS in their submission – “Submission re: Irrigation Prices for SunWater Schemes 2011 – 2016 Headworks Utilisation Factors Technical Report”.

HUF determination is based on volumes in storage in the scheme at a number of levels of announced allocation for both High A and High B water allocations. Table 3 sets out the discrepancies identified with the SunWater Report with our application of the Water Sharing Rules in the ROP.

**Table 3 – Volumes for HUF Determination**

<b>Storage volumes</b>	<b>HUF Technical Report</b>	<b>ROP (PVWater)</b>
High A at 80%	44035 ML	48884 ML
High A at 100%, High B at 10%	56478 ML	61963 ML
High A and High B at 100%	102292 ML	114708 ML

In addition to these discrepancies, it is not possible to reconcile the calculations used to determine the HUF from the information presented by SunWater in the Technical Report. This requires further detailed explanation before the HUF figures can be accepted. This is to include demonstration of the results from the various 15 year sequences stated to be used to verify that the appropriate 15 year period has been adopted.

*Section 5 - Risks to the Plan and Possible Price Reset Triggers*

In view of the major deficiencies in the NSP particularly in the area of details of proposed costs, it is not supported that there be any mechanisms in place for price reset triggers as proposed by SunWater. On the contrary, it is contended that any indexation of prices during the pricing period should factor in productivity gains to ensure that major cost blow outs do not occur as appears to have occurred with the present price path without any reference to customers at a scheme level.

Outbreak of noxious weeds cannot be included as a possible price reset trigger. All other land owners are responsible for management of their land and for the control of noxious weed outbreaks. They do not have the ability, as SunWater proposes, to pass the cost onto their customers or clients.

It is accepted that unforeseen events may arise during the pricing period that could have major implications for costs. In these circumstances it is expected that SunWater would adopt open and transparent consultation with customers to develop a strategy to rectify the situation including funding arrangements. This is the complete opposite to the present arrangements where SunWater have spent almost \$7 million in the Pioneer River WSS over five years without any reporting to customers on the expenditure.

We would be happy to provide any further information required on our submission to the Pioneer River WSS Network Service Plan. We also reserve the right to provide additional submissions on the NSP if further details are provided or clarification is provided of the various matters we have raised in this initial submission.

Yours sincerely

**J R Palmer**  
**MANAGER**