



BDO Kendalls

Audit of Water Trader

SunWater

November 2008

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1. Introduction

This report is on the independent audit of SunWater's water trader function. It is the first such review to be carried out and, as such, documents SunWater's current processes and information flows relating to the water trader function.

The key objectives of the audit are to assess the adequacy of the ring-fencing arrangements for SunWater's sale of temporary allocations, including mechanisms relating to the disclosure of confidential information by SunWater, and to determine whether SunWater is complying with the Water Trading Code of Conduct generally.

1.1 Water Trading Code of Conduct

SunWater's Water Trader function has two objectives:

- Commercial – to trade SunWater's water allocations at a fair market price and one that provides for a reasonable rate of return on the resources used in holding and trading water allocations;
- Economic – to facilitate the development of a more efficient market.

In January 2007, SunWater issued a "Water Trading Code of Conduct" to give buyers confidence that it is acting with integrity and thereby help ensure an effective water market.

The key features of the Code are:

- **Market Facilitation and Education**
 - provision of timely and relevant information on allocations, new or augmented infrastructure, volumes and prices through the SunWater website or that of the Department of Natural Resources and Water (NRW).
 - SunWater to use the online Water Exchange for temporary trading of its own allocations.
- **Transparent Trading Processes**
 - publication of the volume and timing of water allocations to be traded and whether they will be released by permanent transfer, term allocation or temporary transfer.
- **Pricing**
 - trading can take place through a public exchange, by tender or auction or through direct negotiation with customers.
 - no price discrimination for the same product delivered at the same time.
- **Approval of Trades**
 - trades between customers will be approved based on published criteria.
 - seasonal assignments (temporary trades):
 - no discrimination between those involving customers and SunWater.
 - approved in accordance with criteria in temporary trade application forms on SunWater's website.

- permanent trades
 - Interim Water Allocations - to be approved by NRW in accordance with the relevant Interim Resource Allocation Plan (IROP).
 - Water Allocations – to be approved by the Chief Executive.
- term allocations
 - no discrimination between allocations involving customers and those involving SunWater.
 - to be approved in accordance with the ROP or IROP on NRW's website.
- **Disclosure** – standard water delivery and trading contracts to be on SunWater's website.
- **Compliance**
 - SunWater to maintain procedures to ensure compliance with the Code.
 - an annual audit by an independent external party to report on SunWater's compliance.
- **Ring-fencing** – ensuring the water trader only has access to market information that is available to every other market participant.
- **Dispute Resolution** - customer access to a binding process.
- **Breaches** – to be reported immediately to Queensland Treasury, investigated by an independent body, and, if the Code has been breached, the nature and resolution of the breach to be disclosed in SunWater's annual report.

A full copy of the Code of Conduct is at Appendix 1.

It is noted that the Code was developed on the basis that the Water Trader function would be carried out internally, whereas SunWater has since outsourced the function to Psi Delta Pty Ltd which, in turn, has contracted with Elders to administer water sales and auctions in regional areas. As a result, some of the provisions of the Code of Conduct are not as relevant or critical as originally anticipated.

1.2 Terms of Reference for Audit

The Terms of Reference for the audit provide for a report which identifies the adequacy of internal procedures to ensure compliance with SunWater's Code of Conduct as well as an assessment of actual compliance, including:

1. an assessment of the current internal mechanisms associated with the protection of confidential information, the disclosure of market information and the implementation of SunWater's Ring-fencing Undertaking;
2. an assessment of the non-discriminatory approval of water trades; and
3. the provision of recommendations on areas in which SunWater's internal mechanisms and procedures can be improved.

Further, the report is to explain the approach and methods used in reaching its findings.

1.3 Approach and Methods

To meet the Terms of Reference, the audit adopted the following methodology:

1. review the publicly-available information on the websites of SunWater (including the Water Trader pages) and NRW (including the ROPs and IROPs).
2. review the contract with the Water Trader.
3. review the quarterly reports of the Water Trader.
4. identify the nature and details of water trades carried out to date.
5. inquire whether any disputes had been notified to SunWater or Queensland Treasury.
6. understand SunWater's processes for releasing information to the market and for protecting confidential information.
7. assess the appropriateness of how market-sensitive information is released.
8. understand the nature of information SunWater provides to the Water Trader and the Water Trader's contacts with particular areas of SunWater.
9. understand the nature of information the Water Trader provides to Elders and its contacts with particular areas of SunWater.
10. assess the scope and appropriateness of market-sensitive information being provided to the Water Trader and Elders.
11. assess the adequacy of the Ring Fencing arrangements and SunWater's compliance with the Ring Fencing Undertaking.
12. review the water trade approvals and documentation to identify any evidence of price discrimination.

As this was the first audit of the Water Trader function, the report documents the current processes relating to SunWater's sale of water allocations.

2. Water Trading

This section describes the processes in place within SunWater, the Water Trader (Psi Delta) and the Water Trading Administrator (Elders) that relate to the sale of water allocations.

2.1 Processes

In July 2007, SunWater contracted with Psi Delta Pty Ltd to undertake the role of Water Broker for a period of two years. This role involves the following processes:

- selling rights to annual water use for SunWater-held allocations as seasonal assignments (temporary transfers);
- listing and selling trades on SunWater's online Water Exchange wherever possible;
- developing an Annual Water Trading Plan consistent with SunWater's Scheme Water Trading Strategies (which in turn are based on its Annual Portfolio Strategy). The Plan is to contain:
 - location of trades (Water Exchange, direct negotiations, auction or tender);
 - volumes to be traded;
 - trading frequency and timing;
 - predicted reserve prices;
 - KPIs agreed with SunWater.
- reporting:
 - a monthly trust account reconciliation;
 - quarterly reports;
 - an annual report;
- development of a Quality Management Plan;
- planning, strategy and publicity, including annual tours of the 10 largest schemes, including meetings with local SunWater managers (compliant with Ring Fencing arrangements);
- having SunWater accounts for each scheme at which water is to be traded. SunWater is to transfer to these accounts all volumes that are announced in the Scheme Trading Strategies or become available;
- providing access to the process and systems for itself and Elders to facilitate the annual water trading audit; and
- payment of:
 - a sales commission;
 - an annual fee for trading plans, marketing and reporting;
 - the reimbursement of approved expenses; and
 - an incentive of a proportion of the excess of sales revenue over marketing costs and SunWater's minimum prices.

The administration of water sales is carried out by Elders, whose local offices and agents act as the first contact point for customers. The offices are co-ordinated by Elders' Queensland Manager for Rural Properties.

In practice, Elders' role involves the following process for water sales:

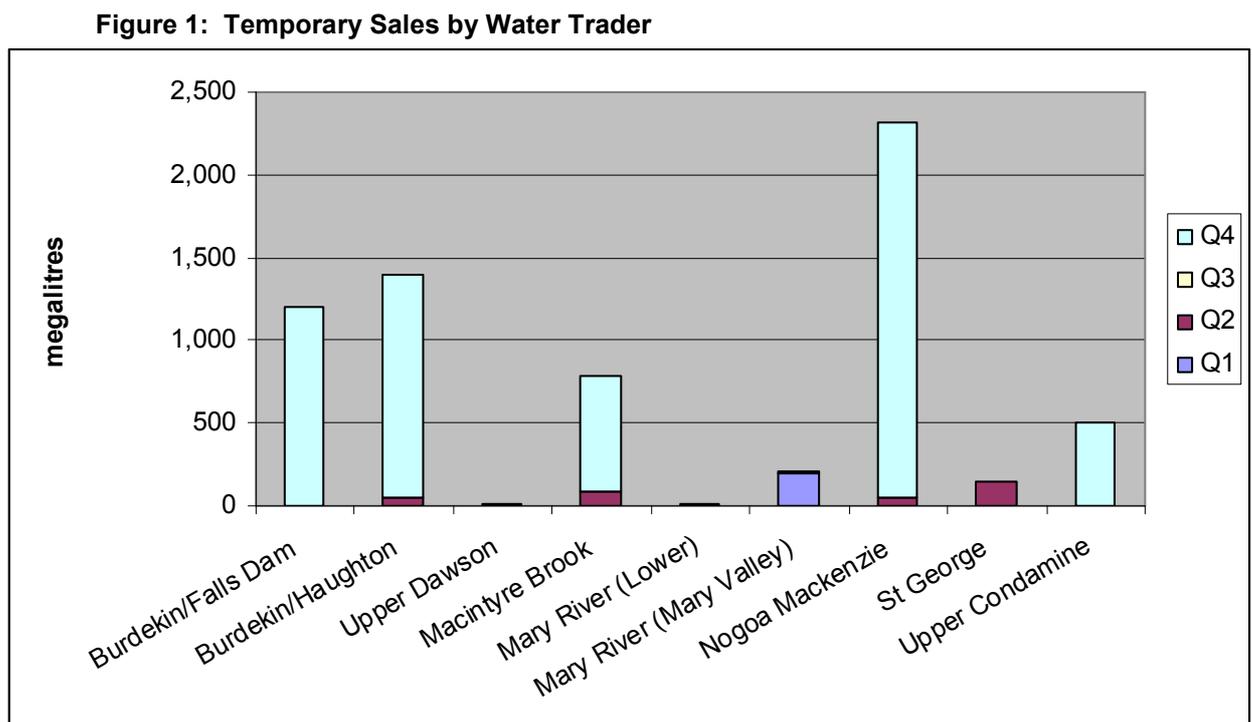
- queries from SunWater account holders are handled by the salesperson in the relevant Elders branch, who negotiates a price at least equal to SunWater's minimum price at the time. The buyer signs a temporary transfer form which is approved by Elders' Queensland Manager for Rural Properties or its water trading administrator. Once the buyer's funds are deposited to its trust account, the Elders administrator faxes the temporary transfer form (see Appendix 3) to the relevant SunWater regional office for that scheme and prepares a sales advice showing the sales value and its commission and sends it to Psi Delta.

A similar process is used for water auctions carried out by Elders.

2.2 Trading Activity

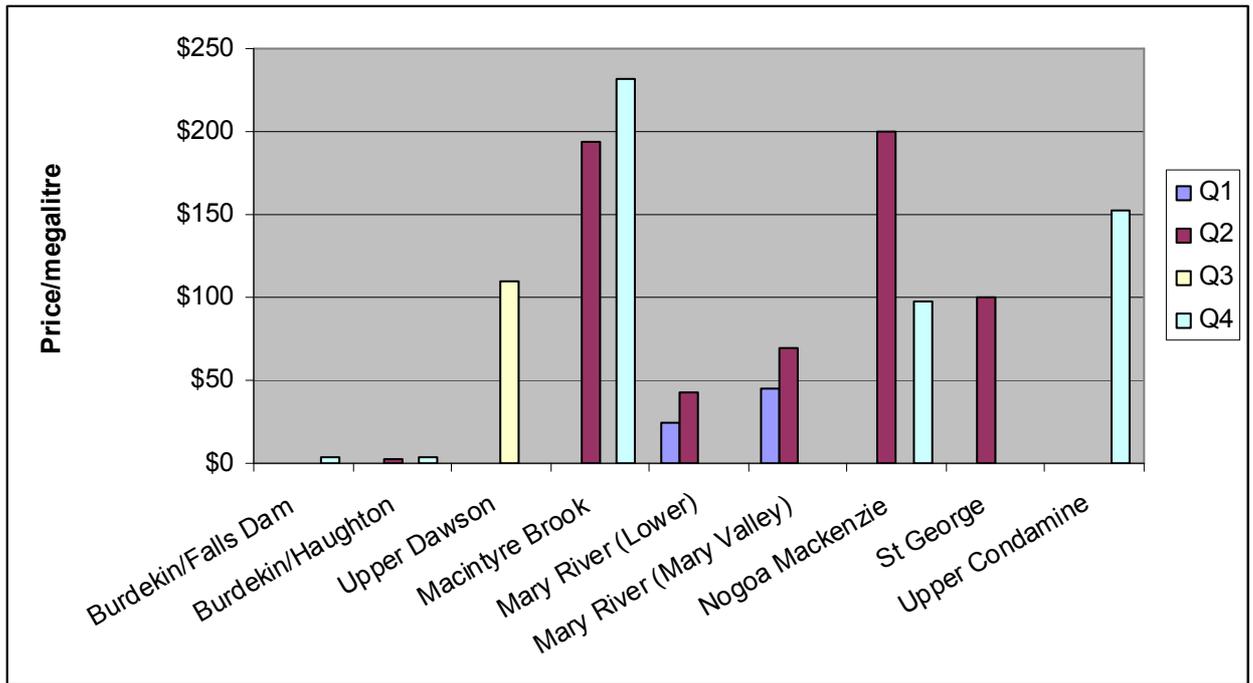
To date, the Water Trader has processed 22 temporary water trades, totalling 6,580 megalitres. The total value of these trades was \$520,450, giving an average price of \$79/megalitre.

The quarterly volume of sales for each scheme during 2007-08 is shown in Figure 1.



The prices received for these sales during 2007-08 are shown in Figure 2.

Figure 2: Prices of Temporary Sales by Water Trader



2.3 Information Flows

Market Information

For intended temporary transfers of SunWater’s allocations, market sensitive information relates to the volume of forthcoming allocations to be announced by SunWater. This information determines the supply of water available for sale in the scheme or sub-scheme and would generally be a major determinant of its price, together with knowledge of likely demand for that water from other potential buyers.

In practice, potential buyers can estimate the volume of water to be allocated by:

- observation of the water level in the catchment; and
- reference to the water sharing formula in the ROP or IROP for that scheme or sub-scheme.

The water sharing rules specify the formula for determining how much water will be made available and shared between the water allocation priority groups (which, depending on the scheme, can include medium, medium A and high priorities). For example, for the Dawson Valley Water Supply Scheme, the announced medium priority allocations are determined by the formula in the Fitzroy Basin ROP, which is:

$$(A_{Am} * MPA) + (A_{Ama} * MAPA) = (UV + IN - HPA - RE - TOL + USE - VIWY) * 100$$

where:

A_{Am} is the % allocation for medium priority

MPA is the volume of medium priority allocations

A_{Ama} is the % allocation for medium A priority

MPA is the volume of medium A priority allocations

UV is the useable volume in the storage(s), being the current volume *less* the dead storage volume *less* storage losses

IN is the allowance for inflows, as specified in a table in the ROP

HPA is the volume of high priority allocations

RE is the reserve set aside for future years, as specified in a table in the ROP.

TOL is the allowance for transmission and operational losses, calculated from factors in a table in the ROP and announced allocations

USE is the volume of water taken to date.

VIWY is the volume of unused allocation transferred from the previous year.

As the ROL (Resource Operations Licence) holder for particular schemes, SunWater is required to announce an *announced allocation* immediately before the start of the water year for a scheme, and an *announced allocation* percentage for each priority group within two weeks of this.

Further, SunWater must review and announce the allocation percentages within two weeks of a major inflow, or every three months if the initial allocation was less than 100%.

SunWater has documented its “Announced Allocation Process” on its intranet. This process provides for:

1. the Yield Hydrology team within the Corporate Strategy unit to:
 - a. initiate or review announced allocations;
 - b. calculate allocations by reviewing the storage and usage data in SWIMS, confirming its currency with the regional office;
2. the Water Accounting and Standards team within the Corporate Strategy unit to:
 - a. audit the announced allocation calculation;
 - b. communicate the announced allocation to NRW and regional offices, by email to customers and, where required by the relevant ROP, by press release.

Confidential Information

Besides the market-sensitive information, the confidential information SunWater could access regarding water trading may be the prices that individual account holders are willing to pay for water if they transact through the online SunWater Exchange, rather than through Elders. In practice, buyers have not used the online facility and presumably would prefer to use Elders if they had concerns about SunWater being able to access bid prices in the Exchange.

3. Findings and Recommendations

In following the methodology set out in section 1.3, we found that:

1. SunWater's current internal mechanisms associated with the protection of confidential information, the disclosure of market information and the implementation of its Ring-fencing Undertaking are appropriate;
2. there is no indication of discriminatory approval of water trades and no record of disputes notified to SunWater or Queensland Treasury;
3. SunWater processes are adequate to ensure compliance with the Water Trading Code of Conduct;
4. SunWater has in practice complied with the Code.

We recommend that, as the Water Trading Code of Conduct was developed on the basis that the Water Trader function would be carried out internally, whereas it has since been outsourced, SunWater modify the Code to reflect this.

Appendix 1: Code of Conduct

Purpose & Scope

The purpose of this Code of Conduct is to set out how SunWater will carry out its water trading activities within the portfolio strategy and scheme trading strategies approved by the SunWater Board. These activities comprise SunWater's water trading through permanent and temporary transfers, and term allocations.

SunWater seeks to put in place mechanisms to establish a well designed trading framework for its own allocations that is transparent and provides clarity to market participants. At the same time, SunWater seeks to allow a formative water market to develop in a competitive environment that can deliver economic benefits to water users and regional economies.

Objectives

The objectives of this Code are to:

- Ensure open and transparent access to a water trading market for buyers seeking to purchase water;
- Set out to market participants how SunWater will go about trading its water allocations;
- Provide an auditable process and policies to enable market participants to have confidence that SunWater is complying with its Code;
- Develop and grow water markets for the benefit for all water allocation holders and water users;
- Provide the opportunity to educate water users so as to develop an informed market; and
- Assure integrity within the water trading market.

Code Undertakings:

1. Market Facilitation and Education

SunWater will make market information publicly available through its website. This information will include:

- Up to date announced allocations for each scheme;
- Development proposals for new or augmentation of water infrastructure in each scheme;
- Release of new water allocation (permanent and temporary);
- SunWater trading intentions for each scheme;
- The total volume available in a particular water supply scheme at any time, and volumes used and the residual volumes potentially available for trading in the market (based on the most recent data available);
- Historic information on water use;
- Total volumes traded over the current Water Year;
- Historic information on trading prices;
- Regulated price information and, where available, commercial delivery prices;
- Storage levels and streamflows; and
- Historic rainfall.

Where SunWater is not the custodian of all market information, it will provide links to the relevant websites, such as the Department of Natural Resources and Mines.

SunWater will utilise its online Water Exchange for the temporary trading of SunWater held allocations. SunWater will operate on the Water Exchange in the same way that other customers can use the Exchange to trade their allocations. The Water Exchange provides an anonymous trading mechanism which reduces barriers to trading in SunWater schemes. The Exchange provides trading information and improved trading mechanisms, including:

- Vendor volumes and bids through the Water Exchange, by Scheme;
- Purchase volume and bids through the Water Exchange, by Scheme; and
- Matching of buyers and sellers in the Scheme, through a pool mechanism.

2. Transparent Trading Processes

SunWater will publish, for all its Water Supply Schemes where it holds any water allocations that it can trade, information as to how it will release the water allocations it holds, for either permanent transfer, term allocation, or temporary transfer to the market.

This information will include:

- The volume of water to be made available by product (that is permanent, lease or seasonal assignment); and
- The timing of volumes to be made available.

These trading intentions will be made available on SunWater's website from time to time as appropriate.

3. Pricing

In general, SunWater will operate within normal market mechanisms when it trades or leases its allocations. This may take the form of:

- Trading through a public exchange;
- Offering its products through a tender or auction process outside of any public exchange; or
- Through direct negotiation with customers.

4. Non-discriminatory Pricing

SunWater will not discriminate in its pricing between different customers where the same product is being traded at the same point in time.

5. Approval of Trades

In performing its function of approving trades between customers, SunWater will decide approvals in accordance with the published criteria and conditions applying to the type of trade.

5.1 Approval of Seasonal Assignments (Temporary Trades)

In approving Seasonal Assignments (temporary trades) SunWater will:

- Not discriminate between seasonal assignments involving customers and seasonal assignments involving SunWater; and

- Decide approvals in accordance with published temporary trade criteria contained in temporary trade application forms published in the SunWater web site.

5.2 Approval of Permanent Trades

5.2.2 Interim Water Allocations (IWA)

Permanent trades of IWA will be approved by the Department of Natural Resources in accordance with the relevant Interim Resource Operation Plan published on the Department's website.

5.2.3 Water Allocation

Permanent trades of water allocation will be approved by the Chief Executive. SunWater will not discriminate between sales involving customers and those involving SunWater.

5.3 Approval of Term Allocations

In approving term allocations SunWater will:

- Not discriminate between leases involving customers and those involving SunWater; and
- Decide approvals in accordance with the relevant scheme Resource Operation Plan or Interim Resource Operation Plan published on the Department of Natural Resources website.

6. Disclosure of Contract Details

SunWater's standard water delivery and water trading contracts will be made available on its website.

7. Compliance

SunWater will establish and maintain appropriate internal procedures to ensure that it complies with the undertakings within this Code of Conduct.

SunWater will demonstrate the adequacy of these procedures through an annual audit that will be conducted by an independent external party. The audit will report on SunWater's compliance with this Code, Water Trading Policies and Procedures.

The terms of reference for the audit will be available on SunWater's website.

The Audit report, with commercially sensitive information removed, will be published on SunWater's website.

8. Ring-fencing

To assist in promoting competition and assuring integrity in water trading in schemes owned by SunWater, SunWater will put in place systems and procedures through its ring-fencing arrangements to ensure its water trader only has access to market information that is available to every other market participant. The ring-fencing arrangements will be documented in the "Ringfencing Guidelines" which will be published on SunWater's website.

9. Binding Dispute Resolution

All customers and prospective customers will have access to a binding dispute resolution process for complaints in respect to SunWater's compliance with this Code that cannot be resolved through negotiation.

A copy of SunWater's dispute resolution framework will be made available on SunWater's website.

10. Breaches of SunWater's Water Trading Code of Conduct

Immediately upon becoming aware that the breach has occurred, SunWater will provide a report of any breach of any of its commitments under this Code of Conduct to Queensland Treasury.

Potential breaches of the Code will be investigated by an independent body agreed between both parties. The final report of the investigation will be provided to Treasury.

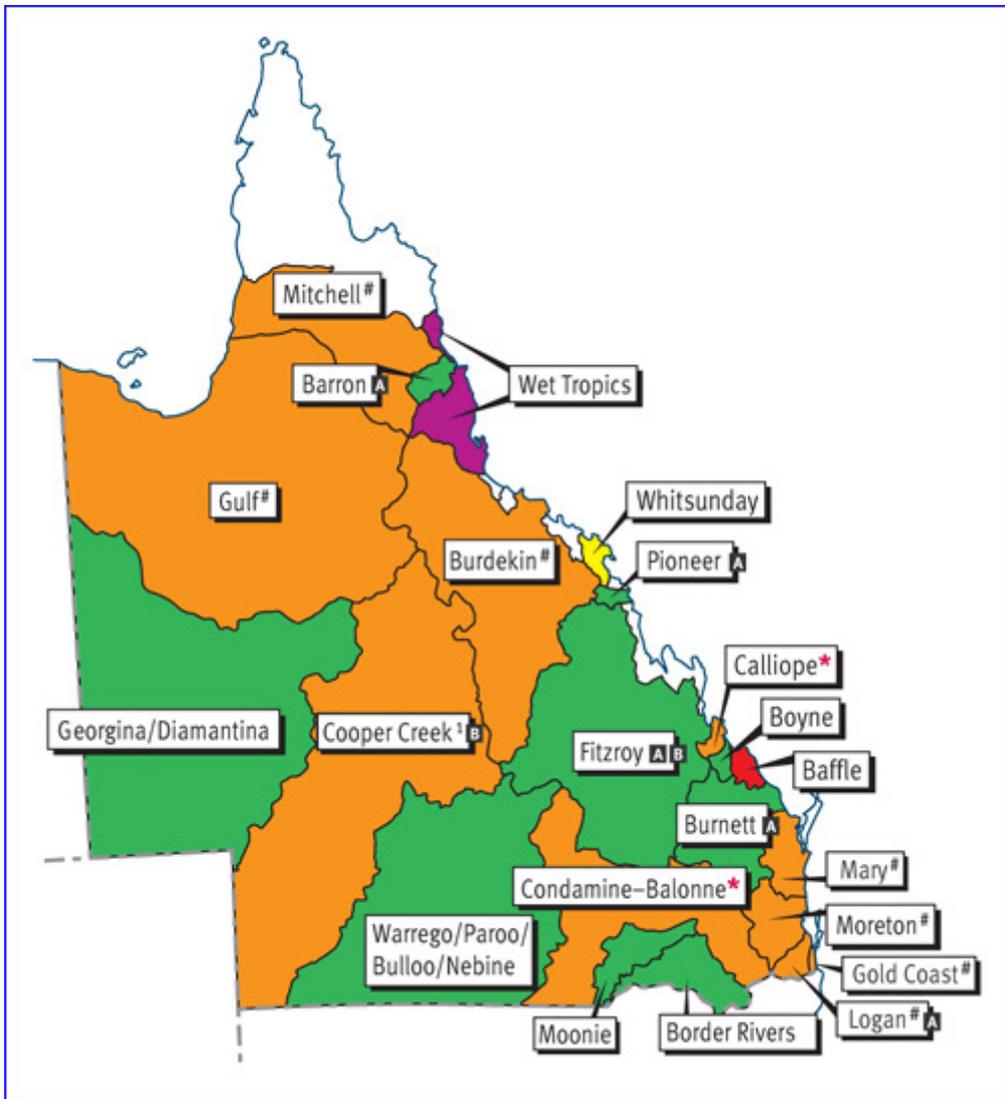
Where it has been found that SunWater has committed a breach of Code, the nature and resolution of the breach will be publicly reported in SunWater's Annual Report.

11. Revisions

Revisions to the Water Trading Framework will be approved by the Ministers for the Queensland Competition Authority prior to implementation and will be published on the SunWater web site.

After three years of operation of the Framework, a full review will be undertaken within nine (9) months of that date.

Appendix 2: Status of WRPs and ROPs



- Future plan proposed
- Draft WRP in preparation
- Draft WRP released, ROP in preparation
- WRP finalized
 - # draft ROP in preparation
 - * draft ROP released
- ROP finalized

Appendix 3: Temporary Transfer Form



SunWater Limited
ACN 131 094 985

Bundaberg
34 Enterprise Street
PO Box 3247
Bundaberg QLD
4670

Ph: 13 15 89
Fx: 4132 6251

TEMPORARY TRANSFER – UPPER BURNETT WATER SUPPLY SCHEME

Seller's Details:	
Customer Account ID: _____	Water Account ID: _____
Account Holders: _____	print name
_____	print name
_____	print name
Who can we contact regarding this application and your account in general?	
Name: _____	Phone: _____
Address: _____	Alternate Phone: _____
_____	Fax: _____
_____	Email: _____
_____	Address Outside Australia? <input type="checkbox"/> No <input type="checkbox"/> Yes
Buyer's Details:	
Customer Account ID: _____	Water Account ID: _____
Account Holders: _____	print name
_____	print name
_____	print name
Who can we contact regarding this application and your account in general?	
Name: _____	Phone: _____
Address: _____	Alternate Phone: _____
_____	Fax: _____
_____	Email: _____
_____	Address Outside Australia? <input type="checkbox"/> No <input type="checkbox"/> Yes
Transfer Volume Details:	
Seller's Nominated Transfer Volume: _____ ML	Water Year: _____/_____
Transfer Statement	
This approval is made under the standard Water Supply Contract and is a Seasonal Water Assignment under the Water Act 2000.	
The Seller warrants that they have sufficient water available to them under their contract with SunWater for the transfer. The Seller requests to reduce the volume available to them by the Nominated Transfer Volume and the Buyer requests to increase the volume available to them by the Assessed Volume. The Buyer warrants they have approval under the Integrated Planning Act for their pump taking the water. The buyer and seller are aware of the Transfer Conditions on the back of this form.	
To be signed by ALL Account Holders for Buyer and Seller.	
Seller's Signature(s): _____	Date: _____
_____	_____
Buyer's Signature(s): _____	Date: _____
_____	_____



SunWater Limited
ACN 131 034 985

Bundaberg
34 Enterprise Street
PO Box 3247
Bundaberg QLD
4670

Ph: 13 15 89
F: 4132 6251

TEMPORARY TRANSFER – UPPER BURNETT WATER SUPPLY SCHEME

TRANSFER CONDITIONS

Temporary transfers enable two customers to transfer water in the current water year. Please note you can now perform temporary transfers online at www.sunwater.com.au.

The seller's remaining allocation water for the water year will be reduced by the Nominated Transfer Volume. The water available to the buyer will be increased by this volume, less any Loss Adjustment (the Assessed Volume).

The volume available to the buyer is not affected by any increases in Announced Allocation during the water year.

Temporary transfers do not alter the buyer or seller's access conditions for taking water from a channel or pipeline.

Volume that can be transferred

The maximum amount the seller may transfer is the volume available to the seller at the time of application. By signing this form, the seller warrants they have sufficient water available for the temporary transfer. The Seller is encouraged to check their meter reading to determine if such water is available.

Available water balances can be viewed at SunWaterOnline.

If the Seller applies to transfer more than their available water, they will be in breach of their contract with SunWater.

Application

To apply for a transfer, the buyer and seller should complete and sign this application form and submit it to the local SunWater Office.

Please ensure the application form is submitted prior to the end of the current water year.

You may wish to contact the Department of Natural Resources and Water to clarify any requirements for a Land and Water Management Plan

The buyer must have a contract with SunWater for delivery of the water. To accelerate the processing of this form, please ensure all accounts are current.

Where the seller may have an arrangement with SunWater for payment of outstanding charges, SunWater may approve the transfer subject to these proceeds being paid to SunWater to reduce the outstanding amount. You can check your balance if you are registered with SunWaterOnline.

Water Charges

The seller's Part A (fixed) charges do not change as a result of the temporary transfer.

Part B consumption charges apply for all water taken where the Standard Supply Contract applies.

Approval of Pumps

The buyer must ensure they have obtained approval under the Integrated Planning Act for their pump. This may include prior approval under a license.

Loss Adjustments

Loss adjustments will apply under normal climatic conditions. SunWater will advise applicants if the loss adjustments will be different from the table below. No losses apply for temporary transfers between sub schemes. No losses apply for water being transferred upstream.

Trading Caps

Please contact your SunWater office on 13 15 89 for details

Transfer Adjustment Fee

A transfer adjustment fee may apply. Please contact your local SunWater Regional Office.

Other

Temporary transfers are not allowed in or out of the John Goleby sub system due to ROL requirements. In accordance with the Burnett Basin Resource Operations Plan, attachment 4.2F, section 2.2, temporary transfers are not permitted into or off the John Goleby sub scheme.

TEMPORARY TRANSFER – UPPER BURNETT WATER SUPPLY SCHEME

SunWater Limited
ACN 131 034 985

Bundaberg
34 Enterprise Street
PO Box 5247
Bundaberg QLD
4670

Ph: 13 15 89
F: 4132 8251

The following temporary transfers are allowed, provided the above parameters are not triggered:

Zone	Location	Zone	Location
OD	Nogo River confluence to Ceratodus gauging station	OD	Nogo River confluence to Ceratodus gauging station
PA	Ceratodus gauging station to AMTD 335.9 km	PA	Ceratodus gauging station to AMTD 335.9 km
SB	Wuruma Dam to AMTD 50.9 km	SB	Wuruma Dam to AMTD 50.9 km
SA	Burnett River confluence to Wuruma Dam	SA	Burnett River confluence to Wuruma Dam
OC	Eidwold gauging station to Nogo River confluence	OC	Eidwold gauging station to Nogo River confluence
OB	AMTD 253 km to Eidwold gauging station	OB	AMTD 253 km to Eidwold gauging station
MA	Burnett River confluence to AMTD 6.0 km	MA	Burnett River confluence to AMTD 6.0 km
OA	Jones Weir to AMTD 253 km	OA	Jones Weir to AMTD 253 km
NC	AMTD 213.1 km to Jones Weir	NC	AMTD 213.1 km to Jones Weir
NB	Claude Wharton Weir to AMTD 213.1 km	NB	Claude Wharton Weir to AMTD 213.1 km
NA	Barambah Creek confluence to Claude Wharton Weir	NA	Barambah Creek confluence to Claude Wharton Weir
GB	AMTD 176 km to Barambah Creek confluence	GB	AMTD 176 km to Barambah Creek confluence
GY	St Agnes Creek confluence to AMTD 176 km	GY	St Agnes Creek confluence to AMTD 176 km

Loss Adjustments:

ROP Zone from	ROP Zone to	% Loss
Wuruma subscheme SA, SB, OC, OB	Jones subscheme MA, OA, NC	15
Wuruma subscheme SA, SB, OC, OB	Claude Wharton subscheme NA, NB, GY, GB	25
Jones subscheme MA, OA, NC	Claude Wharton subscheme NA, NB, GY, GB	15

Office use only

Seller's Contact Profile ID

Buyer's Contact Profile ID

Are the seller's accounts current?

Yes No

Are the buyer's accounts current?

Yes No

Has the application been signed by all?

Yes No

Assessed Volume available to Buyer:

ML

Approval / Refusal letter sent to seller?

Yes No

Approval / Refusal letter sent to buyer?

Yes No

is a transfer required to SunWater for losses?

Yes No

if yes, the volume required is _____ ML

SunWater Account:

Entered into SWMS:

Auto

Authorisation

By:

Date:

Request ID

Accepted By:

Date: