



# Financial performance

## Optimising water use from SunWater schemes

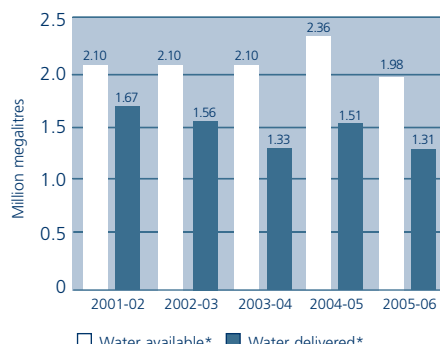
### Water availability and sales

The continuing drought has highlighted the vulnerability of water supplies in Queensland, with storage levels in many dams at historically low levels. Of SunWater's 26 dams, 11 were storing less than 15% of their full storage capacity, and a further seven were storing less than 40% of their full capacity at the end of the year.

These low storage levels were a result of consecutive failed wet seasons across much of the state. The areas most impacted were the south-east corner extending out to the Darling Downs, the central and south Burnett, and up through the centre of the state including Emerald and into the northern Bowen Basin.

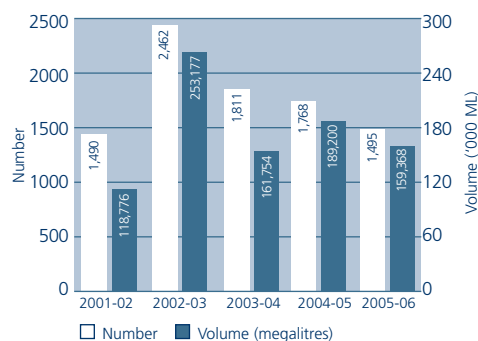
In some areas, good inflows occurred creating a positive outlook for 2006–07. These areas included the Burdekin and Mary river systems, and the areas serviced by Tinaroo Dam on the Atherton Tablelands and Kinchant Dam near Mackay.

**Water availability and deliveries**



\* See notes to water allocations and use table on pages 70–71 for definitions

**Temporary transfers**



In the areas adversely affected by drought, SunWater worked with customers to implement critical water supply strategies designed to optimise the use of available water supplies. SunWater also worked with customers and NRMW to address future supply issues, including assessment of new infrastructure requirements across the state and fast-tracking new developments in critical supply areas.

Across all schemes, SunWater delivered to customers 1.31 million megalitres, which represents 66% of the total available water. This compares with 60% of available water delivered in 2004–05.

### Water trading

Trading of water allocations between customers and with SunWater was lower than in the previous year due to the general reduction in water availability in many schemes. The total level of temporary transfers was 159,361 ML, which represents a 16% reduction on the 2004–05 total.

## Improving the financial viability of SunWater schemes

### Sustainable tariff structures for irrigation water



Regulated price paths for irrigation water services from SunWater's schemes were initially set by the government in 2000, and for most schemes expired on 30 June 2005.

In a joint submission to government, SunWater and the Queensland Farmers Federation (QFF) proposed a consultative process for establishing new price paths. This was supported by the Chairs of customer councils and irrigator committees. The government agreed to the proposed process for implementation during 2005–06, established a water pricing policy and extended the initial price paths to 30 June 2006.

In January 2006, all of SunWater's irrigation customers received an information pack that spelt out the government's policy decisions relating to water pricing:

- A price-setting process involving negotiation between SunWater and customers was endorsed.
- There was no requirement for SunWater to levy any additional rate of return during the next price path period.
- Category 3 schemes (those not capable of reaching the full costs of operation, administration and maintenance) were to be retained and reviewed.
- New price paths were to apply from 1 July 2006 and extend for five years.
- New price paths would not include any capital contributions for dam spillway upgrades over the next five years.

## TBL rating

SunWater embraces the triple bottom line (TBL) concept in its approach to business management and reporting. The corporation has an important role throughout Queensland, and recognises the significant impact it has on the economic, environmental and social values of the state. Across all of its schemes, projects and systems, SunWater aims to achieve best-management practice across the triple bottom line, and in this report has applied indicative TBL ratings to major projects and initiatives using the following criteria.

	Compliance	Beyond compliance	Best practice
Economic performance	✓	✓✓	✓✓✓
Environmental performance	✓	✓✓	✓✓✓
Social performance	✓	✓✓	✓✓✓

- Community service obligations (CSOs) would be paid to SunWater over the five-year period.

### The pricing review and consultation process

The irrigation pricing review involved extensive consultation and engagement with irrigation customers and peak industry representatives. It was based on a two-tiered negotiation process jointly developed between SunWater, SunWater customer councils/irrigator committees, the Queensland Farmers' Federation (QFF), the Local Government Association of Queensland (LGAQ) and the Queensland Resources Council (QRC).

The first stage involved a Statewide Irrigation Pricing Working Group (Tier 1) considering issues that needed to be consistently applied to set prices across SunWater's schemes in a fair and efficient way. Tier 1 comprised 15 people from SunWater senior management and a cross-section of irrigation customers and peak industry bodies.

The key objective of Tier 1 was to define efficient lower-bound costs for the irrigation component of SunWater's water supply schemes and to set reference irrigation tariffs for further consideration during the second stage of the price-setting process. The group met 16 times and produced its report in April 2006.

The second stage (Tier 2) involved Scheme Irrigation Pricing Working Groups discussing scheme-specific issues. The working groups comprised customer and SunWater representatives.

The key task for each Tier 2 working group was to finalise individual scheme irrigation tariffs for the next five years based on the recommendations made by Tier 1 and the government policy conditions. Each Tier 2 group had the opportunity to modify the Tier 1 reference tariffs to take into account scheme-specific issues. Over 60 Tier 2 meetings were held throughout the schemes to settle these issues.

### The new pricing regime

The Tier 2 discussions confirmed the Tier 1 reference tariffs, or modified them within overall cost-recovery objectives to make tariffs more suitable for local circumstances. The Tier 2 groups also identified their preferences on customer service standards/targets, water-use forecasts, tariff structures and form of price control.

Two new tariff innovations known as the 'revenue cap' and the 'drought tariff' were put in place to provide alternative arrangements over the next five years and to assist irrigators manage their water bills during periods of low or no water availability.



Three schemes opted for a revenue cap on Part B charges – Bowen Broken Rivers, Cunnamulla Weir and Macintyre Brook. This fixes the amounts paid by irrigators, removing the risks to users and SunWater associated with forecasting water use. An adjustment will be made at the start of the next price path to correct for any under- or over-payments of Part B revenues dependent on actual water usage.

Two schemes adopted the drought tariff arrangements – Warrill Valley and the Morton Vale section of Central Lockyer. This assists irrigators to manage their water bills during periods of low water availability by providing for a temporary reduction in the Part A charge, and in turn a higher Part A charge during periods of high water availability. The drought tariff includes a mechanism to carry forward to the next price path any under- or over-payments of Part A charges.

Both the drought tariff and the revenue cap involve finance costs so that over-payments earn interest and under-payments are charged interest.

The government committed to a community service obligation (CSO) package of \$26.3m over the five-year price path. This enables a transitioning towards the achievement of lower-bound pricing over the price path for some schemes and supports those schemes that cannot reasonably achieve lower-bound pricing by the end of the price path. The CSO package included funding for the development of resource operations plans over the price path period.

SunWater provided advice to all customers on the new pricing arrangements to apply from 1 July 2006. This represented completion of a process that took several years in the planning and negotiation, and achieved a high level of customer involvement.

## Operational improvements within SunWater

As part of the irrigation pricing process, SunWater's business practices were the subject of two reviews – a benchmarking exercise conducted by an independent consultant, and a cost and efficiency review requested by Tier 1.

The first review compared SunWater's costs with known industry benchmarks in areas such as information technology, human resource management, finance and administration, as well as asset management, operations and maintenance activities. The review showed that SunWater's overall costs were below the industry benchmarks, and the majority of activity areas were at or below efficient benchmark levels.

The second review involved a detailed assessment of SunWater's on-ground operations and management procedures to determine opportunities for productivity improvements and cost savings. Customer representatives involved in the irrigation pricing process had a direct input into this review to ensure that all issues were considered. The overall outcome was that SunWater was recognised as an efficient organisation, but opportunities for further productivity savings existed across a range of areas. One aspect of the review was to compare SunWater's efficiency against a devolved management structure. It was concluded that, under the same governance arrangements, the existing business structure was up to 40% more cost-effective than stand-alone management of schemes.

## Urban and industrial water contracts

Since corporatisation, SunWater has been reviewing expired local government and industrial water supply contracts with a view to achieving commercial terms. Many of these old contracts were agreed in an environment where there was no consideration of the costs of providing water.

During 2005–06, 10 expired urban water contracts were renegotiated to commercial terms and executed, another is expected to be signed early in 2006–07 and work progressed on the renegotiation of a further contract. None of the local governments impacted by the new contracts sought hardship provisions from government.

Twelve expired industrial water contracts were renegotiated to commercial terms and executed during the year. Replacements for two more industrial contracts were prepared for execution early in 2006–07, while negotiations were underway on a further two contracts.

## New water sales

### Water sales in the Burnett



New water allocations made available by Burnett Water P/L storages comprised 20,000 megalitres of medium priority water from Kirar Weir; and 124,000 megalitres of medium priority and 20,000 megalitres of high priority water from Paradise Dam.

SunWater conducted three tenders for Kirar Weir allocations and two tenders for Paradise Dam during the year. Sales from Paradise Dam totalled 2,710 ML of medium-priority water and 1,100 ML of high-priority water, while a further 2,500 ML were leased. For Kirar Weir, 1,597 ML of medium priority water were sold and 1,868 ML were leased.

Water sales from the tenders were slower than the initial market analysis forecast. The level of sales is expected to improve as the process beds down and potential customers become more familiar with pricing expectations. It is planned to hold regular tenders or alternative release methods, for example, off-the-shelf sales.

The Bundaberg Customer Council endorsed an increase to irrigation channel utilisation in the Bundaberg Water Supply Scheme to distribute the additional supplies. No channel upgrades were required due to the level of new water sales.

Amendments were made to the transitional arrangements in the resource operations licence (ROL) to reduce the water volume required in Fred Haigh Dam for triggering the running of the Bundaberg Water Supply Scheme as two sub-schemes, and to remove the limitation of water available under the new allocations to "no more" than that of the existing allocations.

Inflows to the new storages resulted in Paradise Dam filling to 30% of its capacity and Kirar Weir filling to 20% of its capacity during December 2005. No significant inflows were received after this, and irrigation releases resulted in the level of Paradise Dam falling to 16% and Kirar Weir falling to 11% by 30 June.

## Investing in new business

As the major water service provider to regional Queensland, SunWater is ideally positioned to address the growing water supply needs of communities and industry throughout the state. SunWater has been proactive in seeking opportunities for enhancement of existing supplies and investing in new projects to meet the expanding needs of existing customers and servicing new customers.

### Addressing critical water issues in the Bowen Basin

Communities, coal mines and other industries in the Bowen Basin have been facing critical water supply shortages as a result of repeated wet season failures. Existing water storages in the area have been at critically low levels, and it was recognised that, even in normal years, reliability of supply was insufficient to support projected future demands from the expanding coal-mining industry.

SunWater moved quickly to develop a water supply strategy for the basin that

would address current shortages and future demands. The strategy comprised an offstream storage alongside the existing Bowen River Weir to improve the reliability of existing supplies, a pipeline from the Burdekin River to bring additional supplies to the area to cater for the expanding coal industry, and extensions to the Eungella Water Pipeline to enable distribution of existing and new supplies to new coal mining customers.

### Gattonvale Offstream Storage



After fast-tracking investigation, design and land tenure issues, SunWater commenced construction of the \$22m Gattonvale Offstream Storage in October 2004. The project included a 5,200 ML clay-lined storage, and a pump station and rising main to transfer water to the offstream storage from the Bowen River Weir.

By August 2005 the storage was completed and fully operational. By 30 September it was holding about 4,800 ML of water, which enabled the announced allocation for the beneficiaries to be increased from 50% to 63%. On 4 April 2006, the storage was filled to its capacity.

An analysis of the period since Gattonvale commenced storing water indicated that, without the new storage, four releases from Eungella Dam totalling about 7,600 ML would have been necessary. Eungella Dam, the main supply for the area, was storing 16,800 ML (15% of capacity) at 30 June 2006. Without the new storage it would have been substantially lower.

The Eungella Dam water saved during the year was almost equivalent to the annual water use by customers drawing water directly from the dam. These customers include the BMA mines, Hail Creek Mine, Moranbah North Mine and the town of Moranbah. Production from just one of



Burdekin-Moranbah Pipeline construction



these mines amounts to several hundred million dollars per annum. In consideration of the continuing drought, the Gattinvale Offstream Storage has already returned a significant benefit.

### Burdekin–Moranbah Pipeline



SunWater commenced developing the 215 km-long, Burdekin–Moranbah Pipeline during the year. The \$270m pipeline will transport 17,000 ML of water from the Burdekin River to new and existing coal mines in the Moranbah area and is expected to meet medium-term industry expansion requirements.

SunWater worked closely with industry and community stakeholders to determine the feasibility of and support for the pipeline, and to establish an optimum pipeline route. Pipeline design was funded by six foundation customers – BMA, Excel, Rio Tinto Coal, Macarthur Coal, Carborough Downs Coal and Isaac Plains Coal. The foundation customers signed commercial water supply agreements, which underpinned SunWater's financing of the project.

Negotiations were completed with landholders along the pipeline route, and traditional owners signed an indigenous land use agreement that was lodged with the National Native Title Tribunal. Significantly, the project did not require the compulsory acquisition of any Native Title rights or land interests.

Supply and construction contracts were let and the first pipes were delivered to site in December 2005. Construction activities then commenced, and by 30 June about 40 kilometres of pipe had been laid underground. Civil works were completed for two pump stations and commenced on a third, while major refurbishment work on Gorge Weir and construction of an adjacent pump station was well underway.

The major motors were sourced from Brazil, while the pumps are being built in Victoria and will be transported to site as required from mid 2006–07.

Close attention to environmental impacts has been a feature of the project's implementation. One aspect of the environmental management plan has been routine inspections of the pipeline trench by leading reptile experts to rescue any trapped wildlife.

Delivery of the first stage of the project, which connects with the Eungella Water Pipeline, is planned for March 2007. The initial delivery capacity will be 9,000 ML per year. By July 2007 the pipeline's full capacity of 17,000 ML per year will be available and all participating coal mines will be assured of reliable water supplies.

### Eungella Water Pipeline P/L extensions



To enable distribution of water supplies to new coal mining customers, SunWater, through its subsidiary Eungella Water Pipeline P/L, is extending the existing

Eungella Water Pipeline (EWP) to service new customers to the east and south of Moranbah.

The 46 km-long Eastern Extension to the EWP from Moranbah to Coppabella will deliver 5,600 ML of water to coal mines being developed by AMCI, Macarthur Coal and Millennium Coal. Full access to the pipeline route was secured in November 2005 and the construction contractor took possession of the site and commenced excavation and pipe laying in December 2005. At 30 June 2006, about 29 km of the pipeline had been laid, and overall completion was scheduled for August 2006. Water was allowed to gravitate down the first section of pipeline in late June to allow commissioning and testing to commence.

The 72 km-long Southern Extension to the EWP will deliver 2,500 ML of water to new coal mines being developed by Macarthur Coal and Bowen Basin Coal north of Dysart. Tenders for pipe supply were awarded in April and 60% of the pipes were delivered to site by 30 June. Tenders for pipeline construction closed in May for finalisation by mid August 2006. The scheduled project completion date is March 2007.



Paradise Dam on the Burnett River

## Purchase of Burnett Water P/L



SunWater has acquired new water supply infrastructure that was developed in support of growing water needs in the Burnett/Wide Bay region. The new assets are being integrated into SunWater's existing Bundaberg and Upper Burnett schemes, with resultant improvements in customer service and operational efficiencies.

Burnett Water P/L was established by the government in 2001 to construct the new infrastructure. It built two water storages – Paradise Dam and Kirar Weir – which have not only secured new water supplies for the region, but provided work for up to 500 people over a four-year period and involved hundreds of regional businesses through the supply of goods and services.

Kirar Weir (formerly known as Eidsvold Weir) was completed and officially opened in July 2005 by the Honourable Tony McGrady, Minister for State Development and Innovation. Situated on the upper Burnett River near Eidsvold, the weir is capable of yielding 20,000 ML of medium priority water allocations per year, with demand expected to be mainly from irrigators.

Paradise Dam (formerly known as the Burnett River Dam) reached practical completion on 30 November 2005 and was officially opened by the Honourable Peter Beattie, Premier of Queensland on 7 December 2005. The 300,000 ML storage is situated on the Burnett River about 20 km north-west of Biggenden. It is capable of yielding 124,000 ML of medium priority water per year (mainly for agricultural use) and 20,000 ML of high priority water per year (mainly for urban and industrial use). The roller compacted concrete wall was constructed by the Burnett Dam Alliance (comprising Burnett Water P/L, McMahon Holdings, Hydro

Tasmania, SMEC and the Wagner Group). The project incorporated numerous social and environmental initiatives, which are highlighted in the community and environment section of this report.

SunWater purchased the shares of Burnett Water P/L on 16 December 2005 and the company became a wholly-owned subsidiary of the corporation. Company assets included the new infrastructure and associated water allocations, which had previously been granted to Burnett Water P/L by NRMW.

A board comprising four of the directors of SunWater assumed control of Burnett Water P/L, and SunWater was contracted to operate and maintain the infrastructure, act as Burnett Water P/L's agent in the marketing and sale of water allocations, and provide general management services.

## Stag Creek Pipeline



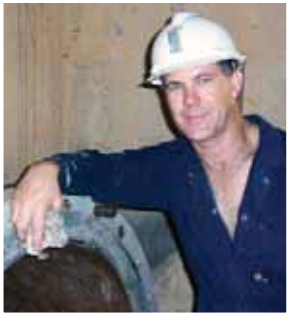
In January 2006, SunWater completed construction of the \$19m Stag Creek extension to the Awoonga–Callide Pipeline to improve the efficiency of water delivery to the Callide power stations.

The Awoonga–Callide Pipeline transports water from the Gladstone Area Water Board's Awoonga Dam to SunWater's Callide Dam for use by the Callide power stations. Prior to the Stag Creek extension being commissioned, water was released from the pipeline at the top of the Calliope Range. It then flowed along Stag Creek Gorge and Callide Creek into Callide Dam. Transmission losses along this natural flow section were estimated at 3,000 ML per year.

The Stag Creek Pipeline was constructed to eliminate these water losses, thus improving the delivery efficiency of one of SunWater's major pipeline systems. The project is improving water supply availability and reliability for some of Queensland's most important power-supply infrastructure.



Construction of the Stag Creek Pipeline



## Planning for growth

SunWater is proactive in seeking commercially viable business growth opportunities. Potential customer needs are assessed and development/enhancement options are investigated with the aim of providing cost-effective solutions with due regard for environmental, cultural and social values. The major growth opportunities investigated during 2005–06 are described below.



### Water for Bowen

SunWater continued to investigate and market to potential customers a proposed water transport scheme to bring much needed water from the Burdekin River to the Bowen region to support industry, horticulture and aquaculture developments.

Preliminary investigations concluded that new and improving market conditions supported the potential for a commercially viable project. A survey indicated potential demand for about 30,000 ML of water per year to support the existing horticultural industry including some potential for growth, and about 30,000 ML for other purposes including aquaculture, primary industries, light and heavy industry, tourism and urban supply.

A concept design was prepared for a channel and pipeline system that would take water from the Burdekin Haughton Water Supply Scheme, across the Stokes Range and down the coastal plain to Bowen. A review of environmental factors was undertaken to identify issues that would need to be addressed in the future stages of investigation. It was concluded that any issues likely to be present could be addressed through available water and land management practices.

On this basis, SunWater and the Queensland Government each committed \$1.5m to a full feasibility study, conditional on potential customers also contributing \$1.5m.

SunWater developed a marketing strategy aimed at establishing contribution agreements with potential customers by the agreed deadline of 6 July 2006. Engagement mechanisms included formal workshops, shed meetings, industry briefings and individual contact. By 30 June, about \$680,000 in contributions had been committed, mostly by potential irrigation customers. Anticipated contributions from industrial developers and aquaculture were not achieved and SunWater will continue discussions with potential customers aimed at developing options to go forward with the project.

### Water from coal seam methane extraction



SunWater continued to work with the Queensland Gas Corporation (QGC) to assess the viability of treating and distributing water that is a by-product

of coal-seam methane extraction at its mine near Chinchilla on the western Darling Downs.

During 2004–05, SunWater carried out a pre-feasibility study into options for the collection, treatment and delivery of water to potential customers in the region at commercially viable rates. In 2005–06 a trial treatment plant was installed and the viability of treatment to potable standard was confirmed. SunWater canvassed potential customers and confirmed demand potential from the town of Chinchilla, Kogan Creek Power Station and an associated coal mine, feedlots, various agricultural activities and potential high value horticulture developments. However, the high cost of water proved to be an issue.

In view of the social and environmental benefits of such a program, QGC and SunWater submitted a joint application for funding through the National Water Initiative, and continued to look for ways of reducing treatment and distribution costs.



Reverse osmosis treatment plant at Queensland Gas Corporation's coal seam methane facility

## Water for Monto Minerals Ltd



SunWater is proposing to construct and operate water supply bores, a treatment plant and a 35 km-long pipeline to transport water to a mine being developed at Goondicum (near Monto) by Monto Minerals Limited.

A feasibility study was undertaken early in the year, which confirmed the project's commercial viability. A pipeline route was selected and discussions commenced with affected landowners. At 30 June, design was underway and approvals were being sought.

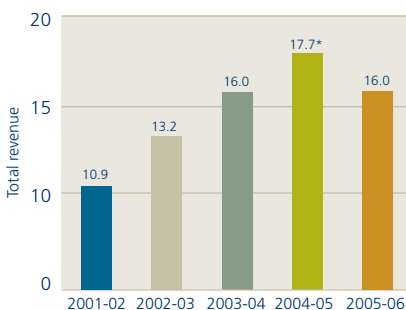
## Water for Swanbank Paper P/L



Work on a project to provide water services for a proposed paper mill at Swanbank paused during the year while Swanbank Paper P/L sought equity funding. SunWater continued to discuss water supply options with SEQWater, Ipswich Water and the Western Corridor Water Recycling Pipeline project team.

## Consultancy and management services

Revenue from consultancies and contracts



\* Includes design work for Moranbah pipelines

## Consultancy projects

During 2005–06 SunWater reduced the level of external consultancy work undertaken due to the high level of engineering support required for internal development projects, in particular the new Bowen Basin pipelines. Nevertheless, a wide portfolio of external work was undertaken across Queensland, in other states and overseas.

### South East Queensland Water Supply Strategy

SunWater was commissioned by NRMW to fast-track a geotechnical program and develop to concept design stage the proposed Traveston Dam on the Mary River, Tilley's Bridge Dam on the Logan and Wyaralong Dam on Teviot Brook. SunWater also carried out geotechnical investigations at the Cedar Grove Weir site on the Logan River for NRMW.

Queensland Water Infrastructure P/L (QWI) engaged SunWater to investigate the Traveston and Wyaralong dam sites to preliminary design stage. This work is programmed for 2006–07, and SunWater's proposed methodology includes extensive flood modelling, yield hydrology modelling, physical hydraulic modelling, geotechnical investigation, materials investigation and preliminary design.

### Western Corridor Recycled Water Scheme

SunWater was engaged by GHD as a specialist sub-consultant on the Western Corridor Recycled Water Project for the delivery of pipelines, pump stations and related infrastructure for SEQWater. The first phase of the project, comprising consultancy services for pre-construction, was delivered as an agreed-rates contract. The overall project delivery is expected to evolve as a progressive alliance.

### Goulburn Murray Water (Victoria)

SunWater continued to provide engineering support to Goulburn–Murray Water through a continuing panel of providers arrangement that was established in 2003–04. The arrangement ended on 30 June 2006 and submissions were called for a new panel of providers. The new arrangement will see the scope widened to engineering input for headworks as well as reticulation works.

### North Vam Nao Project II (Vietnam)

SunWater continued its participation in the AusAID-funded North Vam Nao Water Control Project in Vietnam's Mekong Delta. The project aims to manage monsoonal flooding of the 31,000 ha Vam Nao Island, which leads to widespread damage and water-borne disease. Work includes the upgrading of a perimeter dyke and provision of 16 water control structures (sluices) through the dyke. The aims are to reduce overall flood damage by 95%, extend the crop-growing season for 53,000 farming families through off-season irrigation, and facilitate diversification into higher-value crops.

Construction work continued on the 16 sluices, with the work about 40% complete at the end of the year. The program fell behind schedule due to difficulties with the tendering process and the temporary demobilisation of staff for a period of two months due to security issues. An extension plan is being developed to take the project beyond the scheduled completion date of September 2006.



### *Water Entitlements and Trading project (China)*

SunWater is participating on the working group and two reference panels of a Water Entitlements and Trading (WET) project in China. The project was established as a joint initiative of the Australian Department of Agriculture, Fisheries and Forestry and the Chinese Ministry of Water Resources, with funding provided by AusAID. The objectives of the project are to:

- review the current systems, laws and practices in China related to water entitlements and trading
- provide recommendations on a framework for water entitlements and trading that can be implemented across China
- identify the steps to implementation, including developing plans to implement the framework in two pilot catchments.

During 2005–06 the working group reviewed existing Chinese laws and policies covering water entitlements and trading, and undertook extensive site investigations to observe initiatives at basin and regional levels in water rights development.

### *Engineering studies and surveys*

SunWater completed a range of specialist consultancy work for other water supply asset owners to investigate such issues as dam safety, operational efficiency, catchment yields and optimum infrastructure designs. The major projects undertaken during 2005–06 are listed below:

- Leslie Harrison Dam – Redlands Shire Council engaged SunWater to produce comprehensive dam safety documentation.

- Copperfield River Gorge Dam – NRMW engaged SunWater to carry out a dam safety review.
- SEQWater dams – SEQWater commissioned SunWater to optimise the storage operation of its water supply dams in response to the continuing drought.
- Southern Rural Water (Victoria) – SunWater completed a number of studies for SRW, including a strategic infrastructure review for the Macallister Irrigation District, and studies into the feasibility of projects including potential balancing storages and pipelines.
- Stanwell Corporation – SunWater carried out various dam safety projects on the Stanwell Power Station water supply dam and Koombooloomba Dam, as well as a flood study on the Barron Gorge Diversion Weir.
- Tarong Energy – SunWater carried out deformation surveys, monitoring and inspections at Splyard Creek Dam and the ash dam at Tarong Power Station.
- Tweed River system review (NSW) – The Tweed Shire Council engaged SunWater to undertake a water supply security review of the Tweed River catchment.
- Wilson River Pump Station and Pipeline (NSW) – CH2M HILL engaged SunWater as a specialist sub-consultant to undertake the preliminary design of a raw water pipeline from a pump station on the Wilson River to Rous Water's water treatment plant.

### **Facilities management services**

SunWater is building an extensive portfolio of facilities management work for other infrastructure owners. This is enabling other organisations to benefit from SunWater's

vast experience in this area, and is providing SunWater with new challenges and opportunities for growth and improved profitability. The major facilities management projects undertaken during 2005–06 are outlined below.

### *BMA industrial pipelines*

SunWater continued to operate and maintain six major industrial pipelines, associated pump stations and storage facilities supplying water to the BHP Billiton Mitsubishi Alliance (BMA) coal mines in the Bowen Basin in Central Queensland. The total length of pipeline is about 600 km.

### *Northern Peninsula Area water supplies*

SunWater continued to operate and maintain the water supply for five communities located at the northern tip of Cape York under a contract with the Department of Local Government, Planning, Sport and Recreation. Through this work, SunWater is providing opportunities for local indigenous people to become involved in the management of their water supply facilities.

### *NRMW meter reading*

SunWater holds a contract with NRMW for the reading and maintenance of about 3,000 water meters in 11 groundwater areas and one industrial pipeline. Work carried out by SunWater during the year included quarterly meter readings, minor and major maintenance and condition inspections.

### *SEQWater dams*

SunWater continued to operate and maintain Wivenhoe, Somerset and North Pine dams under an eight-year contract with SEQWater. These dams provide bulk urban water to Brisbane and surrounding urban areas, and Wivenhoe Dam serves an important flood mitigation function

for the Brisbane River environs. SunWater carries out all routine operations and maintenance work, flood operations, dam surveillance and unplanned emergency maintenance.

#### *Wivenhoe mini-hydro*

SunWater continued to operate and maintain a mini-hydro power station at Wivenhoe Dam under contract to Stanwell Corporation. The hydro station generates about 4.5 megawatts of green electricity for the State's power grid. Work undertaken by SunWater includes high voltage isolation, routine start-up and shut-down of the plant, site control and bi-annual shutdown maintenance.

#### *Scrivener Dam*

SunWater continued to operate and maintain Scrivener Dam, which forms Lake Burley Griffin in Canberra, under a five-year contract with the National Capital Authority. SunWater carries out all routine operations and maintenance work, flood operations and unplanned emergency maintenance at the dam. This includes ensuring that the water level in Lake Burley Griffin is maintained within a 15 cm operating level.

#### *Border Rivers Commission*

SunWater continued to operate and maintain works under the control of the Border Rivers Commission, including Glenlyon Dam and Boggabilla Weir, under a contract arrangement.

The contract covers all routine operations and maintenance work, flood operations, dam surveillance and unplanned emergency maintenance of assets. This includes the operation and maintenance of water infrastructure for the township and recreation facilities at Glenlyon Dam.

#### *Dumaresq River Irrigation Project*

SunWater continued to control and distribute water to irrigators in the Border Rivers area between Glenlyon Dam and Mungindi under contract with NRMV. This involves releasing water from Glenlyon Dam for irrigators in both Queensland and New South Wales, with flows within the Border Rivers supplemented from Pindari Dam in New South Wales and Coolmunda Dam in Queensland. A large measure of cooperation with the New South Wales authorities is required to manage this system as water is sourced from storages owned by three separate organisations and is supplied to customers in Queensland and New South Wales.



Wivenhoe Dam – part of the SEQwater contract