

community and
environment.



At a glance

- Sponsorship of regional community events promoted SunWater and its water safety campaign. The sponsorships were supported through the involvement and commitment of local SunWater employees.
- The EIS for the Water for Bowen and Connors River Dam projects progressed well and will be submitted to the Coordinator-General in late 2009. This effort will ensure environmental and social impacts of the projects are managed in a sustainable way.
- Community Liaison Groups met for the Nathan Dam and Connors River Dam projects to allow local impacts to be considered as part of the EIS process.
- Design work for the Bowen River Weir fishway was completed. Construction commenced in July 2009 and is scheduled for completion by March 2010.

SunWater is proud of its strong sense of community and its commitment to responsible environmental management - an overarching philosophy reinforced by staff participation in local events and projects and programs designed to benefit the community and environment.

Sponsorships

With more than half of SunWater's employees living, working and raising their families in regional Queensland, it is no surprise the organisation has a strong sense of community.

SunWater and its employees aim to make a lasting contribution to the success of these communities of which they are a part, not only through financial support in the areas of youth, arts, environment, safety and education, but also through active community participation.

SunWater's annual sponsorship program reveals the organisation's continued involvement with the Southern Cross Soloists Regional Music Schools and as a major sponsor of the SunWater Burdekin Water Festival. SunWater also regularly provides financial support for local shows, sports, fundraisers and industry forums.

It is this kind of regionalised corporate philosophy and ongoing employee involvement that ensures small and large events right across regional Queensland are possible. (See also case study on page 23.)

Public Safety

Equally important to SunWater is community awareness of water safety hazards in and around its dams, weirs and water channels throughout regional Queensland.

Each year SunWater delivers a mass media-based water safety advertising campaign targeting those who use our dams and lakes for recreation. The campaign message encourages people to enjoy the facilities, but to do so in a safe manner.

This campaign is in addition to an annual program of regional community event visits by SunWater's water safety mascot which aims to educate primary school-aged children regarding water safety.

Involvement

SunWater is actively investigating strategic water infrastructure projects right across regional Queensland.

As part of its commitment to positive community relations, SunWater has established Community Liaison Groups (CLG) for two of its major projects, Nathan Dam and Pipelines and Connors River Dam and Pipelines. Members have the opportunity to bring forward community input and opinion for discussion, at each CLG meeting and are provided with details of the project and potential local impacts.

In addition to CLG meetings, SunWater also regularly holds locally-based public information sessions to give the broader community the opportunity to access available project information and discuss this with project team representatives.

Emergency Action Plans

SunWater's Emergency Action Plans (EAPs) for each of its dams are reviewed on an annual basis to ensure that emergency contact details and procedures are up to date. SunWater completed a review of all EAPs associated with its major dams during the year.

The review of the Boondooma, Burdekin Falls and Cania dams' EAPs also served as a simulation exercise to train staff and to review the adequacy of the plans. The exercises identified some opportunities for improvement which are now being implemented.

Weed and pest animal management strategies

The reduction of the amount of chemicals used in weed control is important to SunWater. During the year, a successful trial of equipment fabricated to allow more accurate dosing of copper sulphate (used in irrigation channels to control filamentous algae) was conducted. Without the chemical treatments, the algae prohibit water delivery by forming nets which block and damage SunWater and customer infrastructure. By applying more accurate dosing, the amount of copper sulphate being used and entering the natural system is greatly reduced.

SunWater's Bundaberg operations also undertook a major review of their aquatic weed treatment operations in water distribution channels to reduce the potential impact of herbicides on the receiving waters. Previously water treated with the herbicide Acrolein was able to be held for only 48 hours before being provided to irrigators.

By purchasing additional equipment and redesigning treatment operations, the Bundaberg team were able to increase this withholding time to 72 hours, ensuring that any water which reaches a water course after this time is free of Acrolein. This was also achieved with minimal extension of the channel shutdown time in most systems.

National Greenhouse and Energy Reporting (NGER)

The *National Greenhouse and Energy Reporting Act 2007* (the Act) was passed on 29 September 2007, establishing a mandatory reporting system for corporations that meet certain thresholds of greenhouse gas emissions and energy production and consumption. The first reporting period under the Act commenced on 1 July 2008.

Key features of the Act are:

- Reporting of greenhouse gas emissions, energy consumption and production
- Public disclosure of corporate-level greenhouse gas emissions and energy information, and
- Consistent and comparable data available for decision making, in particular, the development of the Carbon Pollution Reduction Scheme.

SunWater meets the greenhouse gas emissions and energy consumption thresholds and has registered for NGER reporting. The following table summarises the greenhouse gas emissions and energy information reported for the 2008-09 financial year.

GREENHOUSE GAS EMISSIONS AND ENERGY CONSUMPTION	ENERGY CONTENT (GJ)	SCOPE 1 EMISSIONS (TCO2-E)	SCOPE 2 EMISSIONS (TCO2-E)
Fuel Combustion/Energy (Transport)	39,932	2,785	
Other Fuel Consumption (Energy commodities)	510,633		128,889
Total	550,565		

Scope 1 *The release of greenhouse gas into the atmosphere as a direct result of an activity, or series of activities (including ancillary activities) that constitute a facility (i.e. petrol use in cars).*

Scope 2 *The release of greenhouse gas as a result of one or more activities that generate electricity, heating, cooling or steam that is consumed by the facility but that do not form part of the facility (i.e. electricity used by a water pump).*

ENERGY PRODUCTION	ENERGY CONTENT (GJ)
Electricity (water generation)	25,864

Contaminated Land

SunWater is progressively investigating all SunWater land historically used for fuel storage, abrasive blasting operations and landfills (during dam construction). In 2008-09 SunWater investigated a number of sites around the St George area used for these purposes. These sites were found to have only low level contamination (below contaminated land guidelines).

Environmental collaboration/ fishways management

SunWater has been collaborating with the QPIF to identify a suitable prioritisation matrix for fishway modification and construction in Queensland. QPIF developed a draft methodology for use on SunWater storages which takes into account a number of criteria including the location of the fish barrier such as a weir, barrage or dam, with respect to the ocean and/or other barriers. The process will provide a scientific basis for future fishway planning to be applied to highest priority barriers for maximum ecological benefit.

Paradise Dam

In March 2008, the DEWHA released its findings of an audit carried out at Paradise Dam in June 2007.

Paradise Dam was one of a number of projects randomly selected to be audited under the federal *Environment Protection and Biodiversity Conservation Act 1999*.

SunWater is continuing to work with the DEWHA to address the outcomes of the compliance audit.

Dividend reinvestment projects

Online climate tools for irrigators

Development of a working version of online climate tools for irrigators ceased as the outcomes for this project are now considered likely to be more efficiently and effectively delivered as a part of the Australian Government's Australian Water Resource Information System (AWRIS). SunWater has been an active participant in and a contributor of technical expertise to the AWRIS program.

Mareeba Channel fluming study

This project is now complete, with the report documenting the design, installation rationale and operability also finalised. The flume is operating as intended with minimal ongoing issues to date. The outcomes of this research and development project demonstrate there is merit in the concept of the fluming, but practical implementation on an existing channel system with multiple structures to adapt is more expensive than traditional channel lining with further limitations on site selection. The concept has merit in certain brownfield site situations as a quick, cheap solution to convey a large volume of water.



Case study: Making water work and making music play

As part of its ongoing commitment to education and the arts throughout Queensland, SunWater once again sponsored a regional visit by the acclaimed Southern Cross Soloists musical ensemble.

SunWater's annual sponsorship enables this Brisbane-based professional group of musicians to visit different regional towns to run intensive workshops for up and coming young high school musicians.

SunWater research within regional schools found that music students were more than willing to learn new skills and train with skilled professionals but travelling to Brisbane to do so was often time and cost-prohibitive.

SunWater's sponsorship of the music workshops enabled students to enjoy the benefits of one-on-one mentoring by some of Queensland's leading musicians and culminate in a free concert to showcase their burgeoning talents to the community.

The Southern Cross Soloists visited Emerald in 2008 and since the program's inception more than five years ago, have worked with more than 300 students from across regional Queensland.

Students from across Central Queensland gained valuable hands on experience during the Southern Cross Soloists Music Workshop in Emerald, which was sponsored by SunWater.

Bowen River Weir Fishway

Design of the new fishway was completed in the reporting year and construction commenced in July 2009 with a scheduled completion date of March 2010. The installation of this new advanced fishway will help to ensure that fish can migrate and breed, thereby maintaining an important balance to the river's eco-system. This infrastructure will allow fish species around 100 km of extra upstream river habitat for migration from as far downstream as the mouth of the Burdekin River.

Kinchant Dam Wetland Reserve Planning

This project has been deferred since the announced proposal to raise the dam. Plans for a wetland reserve will not be prepared until the future operational use of the area is determined.