



Sustainable Water  
Partner Program  
**CASE STUDIES**





# SUSTAINABLE WATER PARTNER PROGRAM



## Cape Byron Power, Broadwater – A Sustainable Water Partner

### CASE STUDY

#### ACHIEVEMENTS – WATER EFFICIENCY AND OPTIMISATION

This project has focused on understanding water inputs and where and how water is used across operations of Cape Byron Power's energy plant. Given the complexities of this business in relation to where and how water is used, this project has focused on enhancing the visibility of water consumption across all operations.

In addition to the unique usage requirements of this site, seasonal variation in water consumption exists with higher consumption experienced during the sugar-crush season when the adjoining sugar mill (Sunshine Sugar) is in peak production.

Through smart metering technology this project has accomplished a greater understanding of water usage amongst operational and management staff of Cape Byron Power.

ogy enables leakage and water loss to be continuously monitored and swiftly investigated and acted on if/when issues arise.

- Operations and processes of Cape Byron Power require the minimum water volume being consumed. The site is using water as efficiently as possible given their operational needs.
- Given the minimum use requirements of the site in the context of aiming to reduce demand on our region's drinking water supply, an opportunity to substitute town water with bore water was identified. This project will optimise the use of high-quality, treated town water by replacing 80% to 90% of use with bore water as an alternative (as per licence agreements). Once a new bore pipe is commissioned, data will allow the review of town water savings in terms of annual volume saved through substitution.

To assist with the ongoing monitoring of smart metering data a custom dashboard was built which not only displays relevant water consumption data in a user-friendly format, though also allows for better data interrogation and interpretation. The data dashboard incorporates useful tools including benchmark comparisons which allow for water consumption to be compared during elected time periods i.e., has consumption varied or remained similar at the same time over consecutive years?

#### Complementary works by Sunshine Sugar Mill

This project has also incorporated water efficiency investigations and subsequent works with the adjoining sugar mill, managed by Sunshine Sugar. Sunshine Sugar have up-



Cape Byron Power, co-generation energy plant in Broadwater, is a proud partner of Rous County Council through the Sustainable Water Partner Program. Rous County Council has recognised Cape Byron Power for its commitment to water efficiency.

#### WHAT ARE SMART WATER METERS?

*Smart water meters use wireless technology to record water usage data which is collected more frequently and more accurately without having to physically read the water meter. The collection of data on a near real-time basis improves the ability to identify any unusual activity such as water loss, leakage or reduction in water supply.*

With access to data that is close to real-time, provided by more than ten smart meters (including additional sub-meters) the following results were verified:

- Leakage and water loss is next to nothing during shutdown periods when the site is non-operational. Smart metering technol-

### PROJECTS & ACHIEVEMENTS – WATER EFFICIENCY AND COST SAVINGS

Preventing **water leaks** by installing smart metering

Optimising **volume of town water** consumed on site

Replacing **80-90%** of town water with **bore water**

An estimated annual saving of **4 million litres** of town water for Sunshine Sugar Mill

graded their equipment and monitoring practices by installing a new turbidity sensor. This new monitoring equipment has resulted in a significant reduction in town water consumption, an estimated annual saving of more than 4 million litres annually, at an equivalent cost saving of more than \$10,000.

### Improving business practices and improving water efficiency

Water is a significant expense for Cape Byron Power particularly as their facility relies on water supply to drive many of their operations including two biomass fired boilers to produce steam for electricity generation.

To investigate different water efficiency options, Rous County Council in partnership with Cape Byron Power and specialist consultancy, Websters Group, embarked on a collaborative project to understand the Plant's water needs, associated costs and projects to improve water optimisation.

Several site visits and walkthrough assessments were completed to better understand the internal workings of the Plant prior to the commissioning, installation and calibration of smart metering equipment. Smart metering was recommended to allow continuous monitoring of water inputs across site and facilitate the identification and determination of potential water efficiency projects.

The installation of smart metering led to the development of a customised dashboard where all water coming into the site can be tracked and monitored. Following extensive monitoring, a Water Saving Plan was also developed to reflect the findings as well as investigate the total costs, outcomes and return on investment on future water efficiency projects.

The site assessments, investigations and planning that took place were fully funded through Rous County Council's Sustainable Water Partner Program.

*Smart metering is an invaluable tool for Cape Byron Power to instantly respond to any unusual spikes in water use. The data that smart metering technology provides means we can efficiency monitor our water consumption and investigate and respond to any abnormalities in a timely manner.*

*Cape Byron Power is committed to continuous improvement and best practice standards. By being a Sustainable Water Partner there are ongoing positive impacts for our business as well as for the wider community by reducing demand on our precious drinking water supply.*

*Water is an essential part of our operations. Water efficiency and optimisation is not only important for our environment, but it makes sound business sense.*

**Todd Andrews, Cape Byron Power**  
Broadwater Co-Generation Operations Manager

*The Sustainable Water Partner program is an important contribution to firming regional water demand and securing our regional water supply.*

*With a focus on industrial water management, the bespoke digital dashboard has been designed to provide near-real time process flow diagrams, water transfer costing linked to pump energy usage and meter-by-meter detailed analysis for all major site processes.*

*To date the tool has not only assisted in the design of water saving projects but has also provided engineering and maintenance insights that would have otherwise been undetected.*

*The project with Cape Byron Power is a leading example of a water utility using digital water management tools to build relationships with large water users interested in partnering for a water efficient future.*

**Ryan Dillon, Websters Group, Managing Director**



## CAPE BYRON POWER

Cape Byron Power, operated by Cape Byron Management, consists of two 30 MW biomass fired power stations, on the NSW north coast. Together, these form one of the largest renewable base load generators in Australia.

The electricity produced by Cape Byron Power is predominantly produced from sugar cane milling waste, along with certain types of wood residues and energy crops, commonly referred to as 'biomass' fuel.

[www.capebyronpower.com](http://www.capebyronpower.com)



## ROUS COUNTY COUNCIL

Rous County Council is the regional water supply authority providing bulk water to the Council areas of Ballina, Byron, Lismore Shires and the Evans Head area. We work closely with our constituent councils across these local government areas to deliver the Sustainable Water Partner Program in partnership with local businesses like Cape Byron Power.

[www.rous.nsw.gov.au](http://www.rous.nsw.gov.au)

## GET INVOLVED IN THE SUSTAINABLE WATER PARTNER PROGRAM

The aim of the Sustainable Water Partner Program is to support businesses to make changes that will have lasting benefits for the business and broader community - not only saving water but increasing business profitability through lower water and sewer costs.

As part of the program, Rous County Council can offer businesses with an annual water consumption more than five megalitres a fully funded Water Saving Plan as well as rebates of up to \$25,000 annually to implement water saving projects. For small to medium size enterprises, using less than five megalitres annually, we also offer support through water efficiency planning and rebates.

## THIS PROJECT IS REGIONALLY SUPPORTED BY



Contact Rous County Council for eligibility details phone (02) 6623 3800 or email [council@rous.nsw.gov.au](mailto:council@rous.nsw.gov.au)

This document was accurate at time of publication © Rous County Council 2022



# SUSTAINABLE WATER PARTNER PROGRAM



## Summit Sports and Fitness Centre – A Sustainable Water Partner

### CASE STUDY



Summit Sports and Fitness Centre is a proud partner of Rous County Council through the Sustainable Water Partner Program. Rous County Council has recognised Summit Sports and Fitness Centre for its commitment to water efficiency and sustainability, achieving significant water savings.

### ANNUAL WATER SAVINGS ACHIEVED

This project has accomplished a potential annual water saving of more than 470 thousand litres per year. This is the equivalent of filling four school buses with water! It is an ongoing water saving that will result in reducing water charges by more than \$6,500 every year.

By being a Sustainable Water Partner there are ongoing positive impacts for Summit Sports and Fitness Centre as well as for the wider community by reducing demand on our precious drinking water supply.

### Improving business practices and improving water efficiency

Water is a significant expense for Summit Sports and Fitness Centre, Goonellabah particularly as their facilities boast two heated indoor swimming pools.


Following the installation of four large rainwater tanks in 2011, totaling close to 100 thousand litres, business owner Matthew George continued to investigate options to save water and associated costs with running the Centre. The need to look at all options became increasingly apparent during prolonged dry periods including the 2017 – 2020 drought, when the rainwater tanks were dry.

To investigate different water saving options, Rous County Council in partnership with Summit Sports and Fitness Centre and the Australian Sustainability Institute embarked on a collaborative project to understand the Centre's water needs, associated costs and projects to improve water efficiency complementary to the existing rainwater tanks.


An onsite walkthrough assessment was completed to identify feasible upgrades




### ACHIEVEMENTS – WATER EFFICIENCY AND COST SAVINGS



Installing a fresh water **chlorinator** for the indoor pool to reduce volume of wastewater through backwashing



Potentially reducing water charges by more than **\$6,500** every year



Potentially over **470,000** liters of water saved per year

and water saving projects, specifically verifying the outcomes of installing a chlorinator – this is a specialised device that aids water filtration, monitoring and chlorine generation. The chlorinator was recommended with the aim of reducing overall water consumption by reducing the frequency of backwashing and volume lost through wastewater.

A Water Saving Plan was developed for the business owner to consider, investigating the total costs, outcomes and return on investment of this work.

The Water Saving Plan was fully funded through Rous County Council's Sustainable Water Partner Program.

### Achievements – water efficiency and cost savings

Summit Sports and Fitness Centre prioritised works based on the potential water savings, cost savings as well as operational considerations. The purchase and installation of a chlorinator for the indoor pools was a priority project.

This work was planned and implemented by the Summit Sports and Fitness Centre with financial support through the Sustainable Water Partner Program.

*The work we have been able to complete with support from Rous County Council has significantly reduced our water consumption. It has also changed our business operations by reducing a need for staff to manually handle chemicals used for maintaining water quality of our pools. Water quality monitoring is now largely automated with the equipment sending an alert and shutting down if there are any anomalies detected.*

*Since installing the chlorinator, we have experienced many benefits, most significantly a reduction in the frequency of backwashing which saves large volumes of water.*

*We can all play a part to save water – water is precious natural resource, every drop counts!*

**Matthew George owner of Summit Sports and Fitness Centre, Goonellabah**



### GET INVOLVED IN THE SUSTAINABLE WATER PARTNER PROGRAM

The aim of the Sustainable Water Partner Program is to support businesses to make changes that will have lasting benefits for the business and broader community – not only saving water but increasing business profitability through lower water and sewer costs.

As part of the program, Rous County Council can offer businesses with an annual water consumption >5ML a fully funded Water Saving Plan as well as rebates of up to \$25,000 annually to implement water saving projects.



### SUMMIT SPORTS AND FITNESS CENTRE

Summit Sports and Fitness Centre is a locally owned, family business focusing on Women's Fitness, Group Fitness and Learn-to-Swim. Located in Goonellabah, the Centre runs fitness classes, boot camps, aquatics, yoga, aerobics, and has squash & volleyball facilities. The Centre has two heated indoor swimming pools.

[www.summitcentre.com.au](http://www.summitcentre.com.au)



### ROUS COUNTY COUNCIL

Rous County Council is the regional water supply authority providing bulk water to the Council areas of Ballina, Byron, Lismore Shires and the Evans Head area. We work closely with our constituent councils across these local government areas to deliver the Sustainable Water Partner Program in partnership with local businesses like Summit Sports and Fitness Centre.

[www.rous.nsw.gov.au](http://www.rous.nsw.gov.au)

### THIS PROJECT IS REGIONALLY SUPPORTED BY



Contact Rous County Council for eligibility details phone (02) 6623 3800 or email [council@rous.nsw.gov.au](mailto:council@rous.nsw.gov.au)

This document was accurate at time of publication © Rous County Council 2021

## Southern Cross University - A Sustainable Water Partner

### CASE STUDY

#### WORKING TOGETHER TO SAVE WATER

Rous County Council in partnership with Southern Cross University and The Australian Sustainability Institute (ASI Consulting) embarked on a collaborative project to investigate the University's water consumption, associated costs and a range of measures available to improve water efficiency.

This work was undertaken by collating and analysing water consumption data and conducting an onsite walkthrough assessment to identify feasible upgrades and water saving projects.

The onsite assessment, data gathering, and planning process was extensive considering the size, spread and number of water-using facilities onsite including a popular indoor pool complex, multiple nurseries, faculty buildings and other amenities.

Through this process a comprehensive Water Saving Plan was developed identifying priority activities and water saving projects that the University agreed were feasible, cost effective and provided the water saving benefits sought to reduce future costs.



Southern Cross University is a proud partner of Rous County Council through the Sustainable Water Partner Program. Rous County Council has recognised Southern Cross University for its commitment to water efficiency and sustainability, achieving significant water savings.



Top: Southern Cross University backwash reduction project - (L-R) Kirralee RCC, Geoff Cottee, Manager Capital and Minor Works SCU

#### PROJECTS INCLUDED



Installation of a **freshwater chlorinator** for the pool complex in the Fitness Centre to reduce volume of wastewater through backwashing.



Installation of **capillary action watering system** in the tea tree nursery (and trials in other nurseries and garden services on campus).



Upgrades and repairs to **amenity** (shower and toilet) facilities.



Monitoring and managing **water leaks** and the integration of **software and water monitoring systems** (SUMS and Innotech monitoring).

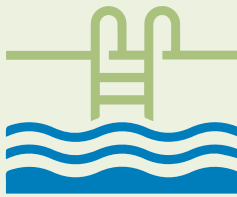
## WATER EFFICIENCY AND COST SAVINGS

### Potential annual water savings

MORE THAN

# 17

MEGALITRES PER YEAR



The equivalent of almost **seven Olympic swimming pools!**

POTENTIAL  
SAVING  
**\$67,000**  
PER ANNUM

which represents a saving of \$67,000 per annum – with significant chemical and energy savings on top of this.

Monitoring continues for this work with additional projects being planned and implemented as time and resources allow.



Southern Cross University backwash reduction project - freshwater chlorinator

*“Our team is ecstatic with the results, as well as water savings; we have also reduced our risk and maintenance costs. This project has not only resulted in significant water savings but has reduced chemical handling for our staff and improved the health and safety of our operations.”*

**Danika Head, Director of Property Services at Southern Cross University**

The University prioritised works based on maximising water savings as well as operational considerations. The installation of a freshwater chlorinator for the indoor pool – backwash reduction project – was a priority action. This work was planned and implemented by the University with financial support through the Sustainable Water Partner Program.

Before and after monitoring of the pool's water use demonstrates a significant reduction through this project. Monitoring data suggests a potential water saving of 17 megalitres annually. This is a water saving equivalent to almost seven Olympic swimming pools

## Get involved in the Sustainable Water Partner Program

The aim of the Sustainable Water Partner Program is to support businesses to make changes that will have lasting benefits for the business and broader community - not only saving water but increasing business profitability through lower water and sewer costs.

As part of the program, Rous County Council can offer businesses with an annual water consumption >5ML a fully funded Water Saving Plan as well as rebates of up to \$25,000 annually to implement water saving projects.



Set in a rainforest location, Southern Cross University's Lismore campus occupies 75 hectares including landscaped gardens, an indoor heated pool and gym (fitness centre). The campus has a food plaza, library, bar, sports fields, plant centres, arts and music studios, health, science and engineering laboratories, lecture theatres and administration buildings. Southern Cross University is a well-recognised landmark of the Northern Rivers region.

[www.scu.edu.au](http://www.scu.edu.au)



Rous County Council is the regional water supply authority providing bulk water to the Council areas of Ballina, Byron, Lismore Shires and the Evans Head area. We work closely with our constituent councils across these local government areas to deliver the Sustainable Water Partner Program in partnership with local businesses like Southern Cross University.

[www.rous.nsw.gov.au](http://www.rous.nsw.gov.au)

### THIS PROJECT IS REGIONALLY SUPPORT BY



Contact Rous County Council for eligibility details phone (02) 6623 3800 or email [council@rous.nsw.gov.au](mailto:council@rous.nsw.gov.au)

# SUSTAINABLE WATER PARTNER PROGRAM



## Discovery Parks - Ballina – A Sustainable Water Partner

### CASE STUDY



Discovery Parks Ballina is a proud partner of Rous County Council through the Sustainable Water Partner Program. Rous County Council has recognised Discovery Parks Ballina for its commitment to water efficiency and monitoring to achieve long-term water savings.

### POTENTIAL ANNUAL WATER SAVINGS ACHIEVED

The installation of smart-metering on the Park's main water meters has been the most significant and beneficial work as part of this project.

Smart water meters have been attached to the Park's main meter to record hourly water usage. The installation of smart-metering has allowed the Park to be more aware of their consumption, trends, triggers and to detect leaks more rapidly, rather than waiting for their quarterly water bill.

This has armed the Park with the information and data needed to detect pipe breaks and leaks in a timely manner, resulting in an estimated potential saving of over \$80,000 per year in water charges.

### Water efficiencies in the tourism accommodation sector

Discovery Parks Ballina in partnership with Rous County Council and REIDEnvironmental embarked on a collaborative project to investigate the Holiday Park's water use, associated costs, and a range of measures available to improve water efficiency.

This work was undertaken by collating and analysing water use data and conducting an onsite walkthrough assessment that identified feasible upgrades and water saving projects.

A comprehensive Water Saving Plan was developed identifying priority activities and water saving projects that the Park and Rous agreed were feasible (both in the short and long-term), cost effective and provided the water saving benefits sought to reduce future costs.

Although several projects were identified in the plan, the timely identification of leaks was prioritised. Leak detection is and continues to be a focus for the Park, particularly given the age of existing infrastructure as well as the Park's position, close to the beach on sandy soils.

*Detecting leaks on sandy sites can be difficult as there is often little indication of a leak from the surface as water quickly drains away down through highly porous sand.*



Installing smart-metering on the main water meter of the Park has been an important step to gain access to more frequent, accurate and timely data, and an equally important step in leak detection. This information is complementary to the weekly water meter reads and comparisons the Park was taking independently to monitor fluctuations and trends in their water use.



*Smart-metering was supported through Ballina Shire Council. Visit [www.ballina.nsw.gov.au](http://www.ballina.nsw.gov.au) for more information.*

## ACHIEVEMENTS – WATER EFFICIENCY AND COST SAVINGS



Upgrading of  
**66** individual taps



A potential  
**69%** reduction in water use



Installation of  
**smart-metering**  
to detect leaks early



Over  
**\$80,000**  
potentially saved per year  
in water charges

## Other projects identified in the Water Saving Plan included:

- Investigating a rainwater tank for pool top-ups. The return on investment of this will be better understood when data from smart-metering of the pool/water playpark area is known;
- Upgrading taps at van and tent sites to restrict existing high flow taps, which are often difficult to completely shut off;
- Upgrading taps in selected amenities to include flow restrictors.

These projects build on water saving works which Discovery Parks Ballina has previously initiated to understand usage, identify issues and isolate leaks including sub-metering the pool and water playpark as well as sub-metering individual permanent cabins. This is in addition to having low volume dual flush toilets and water efficient shower fixtures in their guest amenities.

The Water Saving Plan, identifying projects to complement these existing works, was funded through Rous County Council's Sustainable Water Partner Program.

## Achievements – water efficiency and cost savings

Complementary to installing smart-meters, the Park has focused on continually upgrading 66 individual taps on their caravan and tent sites. Installation of a rainwater tank for pool top-ups is also being investigated.

Completion of these projects will result in an annual potential water savings of more than 320 thousand litres annually. This saving is in addition to significant potential water savings achieved through smart-metering, monitoring and leak detection. It is estimated that this work alone could result in a potential 69% reduction in water use and over \$80,000 saved per year in water charges.

The monitoring component of this project focuses on the most significant area of use and water loss to gain the greatest long-term cost saving benefits and sustainability outcomes.

*The monitoring of water consumption that closely reflects real-time use is valuable in determining the water used by our business prior to receiving our quarterly water bill.*

*From my many years' experience managing holiday parks, data in relation to water use equips our management team with the information needed to make decisions around works and maintenance requirements, particularly if we suspect a leak. This is particularly true for Parks like ours that have multiple occupancies with visitors, campers, caravans, and permanent and guest cabins, each with different water consumption needs.*

*Real-time monitoring of our water use is and will continue to be a valuable tool for Discovery Parks Ballina.*

**Tony Middleton, Park Manager,  
Discovery Parks – Ballina**



# Discovery

PARKS

## DISCOVERY PARKS BALLINA

Discovery Parks Ballina is located just north of the mouth of the Richmond River in the Ballina Shire. The Park is a popular holiday destination for many travellers to the north coast. At full capacity, the Park can accommodate over 500 people. The Park has 65 permanent cabins, 81 holiday cabins and 93 sites for caravans and campers. The Park has and continues to place focus on water use and investigating ways to enhance efficiency particularly in peak tourist times.

[www.discoveryparks.com.au](http://www.discoveryparks.com.au)



**ROUS**  
COUNTY COUNCIL

## ROUS COUNTY COUNCIL

Rous County Council is the regional water supply authority providing bulk water to the Council areas of Ballina, Byron, Lismore Shires and the Evans Head area. We work closely with our constituent councils across these local government areas to deliver the Sustainable Water Partner Program in partnership with local businesses like Discovery Parks Ballina.

[www.rous.nsw.gov.au](http://www.rous.nsw.gov.au)

## GET INVOLVED IN THE SUSTAINABLE WATER PARTNER PROGRAM

The aim of the Sustainable Water Partner Program is to support businesses to make changes that will have lasting benefits for the business and broader community – not only saving water but increasing business profitability through lower water and sewer costs.

As part of the program, Rous County Council can offer businesses with an annual water consumption >5ML a fully funded Water Saving Plan as well as rebates of up to \$25,000 annually to implement water saving projects.

## THIS PROJECT IS REGIONALLY SUPPORTED BY



Contact Rous County Council for eligibility details phone (02) 6623 3800 or email [council@rous.nsw.gov.au](mailto:council@rous.nsw.gov.au)

This document was accurate at time of publication © Rous County Council 2021

# SUSTAINABLE WATER PARTNER PROGRAM



## The Beach Hotel – A Sustainable Water Partner

### CASE STUDY

#### MAKING THE SWITCH TO RECYCLED WATER

The Beach Hotel has reduced demand on our region's potable water supply by over 4 million litres per year – this is equivalent to more than 1.5 Olympic swimming pools! They have accomplished this by connecting the Hotel's toilet and garden irrigation systems to Byron Shire Council's recycled water network through their purple pipes scheme.

*Drinking water, also known as potable water, is used in our homes and businesses, and is supplied to the community through a network of water mains fed from sources like Rocky Creek Dam, located north of Lismore.*

*We can reduce stress on our potable water supplies by switching to recycled water or collecting rainwater to flush our toilets.*

To make the switch, Rous County Council in partnership with the Beach Hotel, alongside Byron Shire Council and REID Environmental, embarked on a project to investigate the Hotel's water use, associated costs and a range of measures available to improve water efficiency.

The first step focused on understanding the Hotel's current use by undertaking a detailed water audit. This was completed by collating and analysing previous water bills, current water-use data and con-

ducting an onsite assessment to identify where and how water was being used for both the Hotel and the Hotel's accommodation complex which includes gardens, a pool and guest accommodation.

Considering the Hotel's size, popularity, and patron numbers, the onsite assessment, data gathering, and planning process for this project was comprehensive.

Through this process, a Water Saving Plan was developed identifying priority activities and water saving projects that the Hotel and Rous agreed were feasible, cost effective and provided the water saving benefits sought to enhance sustainability whilst reducing future costs.

#### These projects included:

- Continuing to upgrade shower heads to water efficient devices rated under the Water Efficiency Labeling and Standards (WELS) Scheme;
- Upgrading water guns in the Hotel kitchen to water efficient devices;
- Investigating outdoor water consumption and opportunities to improve efficiency;
- Connecting the male and female toilets of the Hotel to recycled water.

The Water Saving Plan identifying these projects was fully funded through Rous County Council's Sustainable Water Partner Program.

The Beach Hotel, Byron Bay, is a proud partner of Rous County Council through the Sustainable Water Partner Program. Rous County Council has recognised the Beach Hotel for its commitment to water efficiency and sustainability, which it has achieved by switching to recycled water.

### PROJECTS & ACHIEVEMENTS – WATER EFFICIENCY AND COST SAVINGS

Upgrading  
**SHOWER HEADS**  
to water efficient devices

Upgrading kitchen  
**WATER GUNS**  
to water efficient devices

Over  
**4 MILLION**  
litres annually of potable water saved by connecting toilets & garden to recycled water

Over  
**\$25,000**  
saved per year in water charges

## Achievements – water efficiency and cost savings

The Hotel agreed that the connection of the male and female toilets and outdoor garden irrigation to recycled water were priority projects due to the potential annual water and cost savings.

A switch to recycled water was possible for the Hotel as Byron Shire Council has a recycled water program, known as the purple pipes scheme, available to businesses near the recycled water infrastructure in the Byron CBD.

Taking advantage of the location of the recycled water main, the Beach Hotel coordinated, progressed, and completed this project.

The switch to recycled water for the Hotel's toilets alone will reduce demand on our potable water supply by more

than 4 million litres annually, saving the Hotel more than \$25,000 every year in water charges.

*We are extremely proud to partner with Byron Shire Council and Rous County Council to implement the new system that allows us to utilise recycled water in key areas throughout the venue. The project has many benefits, it is a win-win for the Beach Hotel, our patrons and the community.*

*Clear signage of the purple pipes, recycled water scheme not only communicates important information about the use of recycled water but will hopefully generate more conversations around the value of water, where our water comes from and ways we can conserve it.*

**Anthony Brady, General Manager,  
Beach Hotel, Byron Bay**



## THE BEACH HOTEL

Beach Hotel, Byron Bay is a large open pub including a restaurant and 25 accommodation rooms. It is located on Main Beach, Byron Bay, and is a well-recognised venue in the popular east-coast tourism destination.

[www.beachhotel.com.au](http://www.beachhotel.com.au)



## ROUS COUNTY COUNCIL

Rous County Council is the regional water supply authority providing bulk water to the Council areas of Ballina, Byron, Lismore Shires and the Evans Head area. We work closely with our constituent councils across these local government areas to deliver the Sustainable Water Partner Program in partnership with local businesses like the Beach Hotel.

[www.rous.nsw.gov.au](http://www.rous.nsw.gov.au)

## GET INVOLVED IN THE SUSTAINABLE WATER PARTNER PROGRAM

The aim of the Sustainable Water Partner Program is to support businesses to make changes that will have lasting benefits for the business and broader community – not only saving water but increasing business profitability through lower water and sewer costs.

As part of the program, Rous County Council can offer businesses with an annual water consumption >5ML a fully funded Water Saving Plan as well as rebates of up to \$25,000 annually to implement water saving projects.

## THIS PROJECT IS REGIONALLY SUPPORTED BY



Contact Rous County Council for eligibility details phone (02) 6623 3800 or email [council@rous.nsw.gov.au](mailto:council@rous.nsw.gov.au)

This document was accurate at time of publication © Rous County Council 2021

# Lismore Shopping Square Bronze Partner



**Rous Water**  
sustainable water  
PARTNER PROGRAM

## CASE STUDY

LISMORE SHOPPING  
**Square**



**Rous Water**  
sustainable water  
BRONZE PARTNER



Centre manager Rob Walker said the rainwater would be used to flush the centre's public toilets and estimates they will save 2000 kL/a or two million litres of water per year. They have also installed timed push button taps and dual flush cisterns in the toilets as part of a broader investment in sustainability.

*"Lismore Shopping Square management is delighted with the water savings gained since the installation of the rainwater tanks and is keen to build on this success by exploring further eco-friendly opportunities," Mr Walker said.*

Lismore Shopping Square has been recognised as a Bronze Sustainable Water Partner for their commitment to water efficiency.

### Business profile

Lismore Shopping Square is the region's biggest shopping centre. Located in the heart of Lismore, the centre boasts over 80 speciality stores and undercover car parking for 1,300 vehicles. The centre also has major retailers Big W, Woolworths, Coles and K-mart. One of the more iconic attractions is the famous car-boot market which has been run consistently in the undercover carpark since 1988. These markets have over 200 stalls and are held on the first and third Sundays of each month. The centre employs 600 staff and receives in excess of 4 million visitors per year.



### Description of the water saving project

Lismore Shopping Square achieved substantial water savings by purchasing four 22,700 litre rainwater tanks to be used for flushing toilets and grounds keeping.

### Annual water savings achieved and associated cost savings

These rainwater tanks have allowed Lismore Shopping Square to save almost 5,000 kilolitres a year, bringing their annual consumption from 11,250 kilolitres to 6,250 kilolitres. This represents a reduction of approximately 44% from simply connecting public amenities to use rainwater instead of town water.

### Assistance from Rous Water

Rous Water's paid \$17,500 in rebates to Lismore Shopping Square to support their large investments in rainwater tanks. Rous Water's assistance also included advice on estimated water savings and application assistance.



# Clean and Green Laundry - Bronze Partner



**Rous Water**  
sustainable water  
PARTNER PROGRAM

## CASE STUDY



For owner Mr Ian Juleff the changes have managed to help both the business bottom-line and the region's water supply. "With the savings made from being water efficient we have effectively been able to purchase a new water efficient washing machine every year" Mr Juleff said. He encourages other businesses to contact Rous Water and discuss how they could save water, saying "These water efficiency projects provide an excellent example to the local community of potential savings that can be achieved when local businesses work collaboratively with Rous Water".

The Clean and Green Laundry has been recognised as a Bronze Sustainable Water Partner for their commitment to water efficiency.

### Organisation profile

Clean and Green Laundry is a commercial laundry service which caters to commercial businesses and everyday customers with coin operated washing machines and dryers. The Laundry currently employs two staff and processes around 100 tonnes of laundry each year.

### Water efficiency project

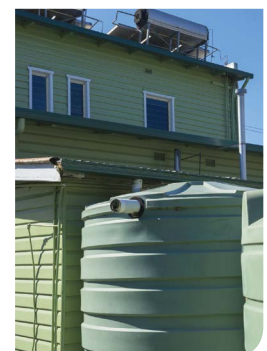
Clean and Green Laundry has achieved significant water savings through the replacement of washing machines with more water efficient models and installation of a rainwater tank to supply the laundry.

Over a 4 year period, the laundry has:

- Replaced 5 top loading washing machines with more water efficient front-loading models
- Installed a 10,000 litre rainwater tank to supply the laundry washing water.

### Annual water savings achieved and associated cost savings

In this time, the Clean and Green Laundry also increased productivity and has achieved an ongoing water saving of over 300 kL each year. The laundry is now using around 40% less town water per tonne of washing.



# Big 4 Ballina Headlands Holiday Park - Silver Partner



**Rous Water**  
sustainable water  
PARTNER PROGRAM

## CASE STUDY



*"We were using a lot of water. Our business was regularly in the top ten highest water users for Rous Water. With the cost of water ever increasing and our aim to improve the sustainability and the environmental friendliness of our business, we had to look at water saving projects." said business owner Graeme Gray. "All of these projects were expensive and time consuming to implement, but the incentive of some funding from Rous Water helped us push forward. The long-term benefits, both financially and environmentally are enormous. Personally it has been very rewarding to see that our hard work to introduce these water saving measures has been so successful."*

The Big 4 Ballina Headlands Holiday Park has been recognised as a Silver Sustainable Water Partner for their commitment to water efficiency.

### Business profile

Big 4 Ballina Headlands Holiday Park is a 15 acre mixed holiday and residential accommodation park, with 125 long-term sites and 75 short term sites, including cabins, caravans and camp sites. There is currently a population of over two hundred permanent residents. Facilities in the park include a swimming pool, spa and children's wading pool, playground, games room and community hall. Currently the park employs 11 staff in total and is home to around 200 permanent residents and 15,000 visitors every year.

### Water efficiency projects

Big 4 Ballina Headlands Holiday Park achieved significant water savings by completing several water efficiency projects over a three year period. Their projects included:

- Replacement of all single flush toilets with dual flush toilets
- Replace urinals with water efficient models
- Replace top loading washing machines with efficient front loading models
- Fitting water meters to 140 permanent residential sites to introduce a user-pays system, encouraging more efficient water use behaviour

- Installation of pressure reduction valves to help reduce water lost through leaks
- Installation of rainwater tanks to top up the swimming pool.



### Annual water savings achieved and associated cost savings

The holiday park's water usage has since fallen by 46% - from 17,000 kilolitres down to 9,000 kilolitres per year - enough to supply about 40 new houses with water. Since 2009 the holiday parks has saved approximately \$16,000 in annual water bills.

### Assistance from Rous Water

Rous Water provided over \$11,000 in rebates to the Big 4 Ballina Headlands Holiday Park to support their water efficiency projects. Projects were staged as cashflow allowed and rebates paid upon completion of each stage of work. Additional support also included advice on estimated water savings and application assistance.

# Summit Sports and Fitness Centre



**Rous Water**  
sustainable water  
PARTNER PROGRAM

## CASE STUDY



*"This initiative has given Summit the opportunity to not only improve its workplace practices, but also to continue to contribute to the sustainability of our local environment. This is something we truly value".*

**Annie** – Manager  
Summit Sports and Fitness Centre

Summit Sports and Fitness Centre has accessed Rous Water's business program to achieve significant water and financial savings.

### Business profile

Summit Sports and Fitness Centre is a proud, locally owned, family business focusing on Women's Fitness, Group Fitness and Learn-to-Swim; setting the benchmark in health and fitness, and learn-to-swim industries, on the North Coast. The gym floor is women's only because they understand that "many women appreciate training with discretion in an atmosphere that mixed gyms simply do not provide", making them unique. Located in Goonellabah, the Centre runs Les Mills Fitness, boot camps, aquatics, yoga, aerobics, and has squash & volleyball facilities.

### Description of the water saving project

The Summit Sports and Fitness Centre has achieved substantial water savings by installing four 22,750 litre rainwater tanks for a combined capacity of 91,000 litres in 2011. These rainwater tanks harvest water from their large 750 m<sup>2</sup> roof and is used for topping up and maintaining their pool facilities.



### Annual water savings achieved and associated cost savings

The installation of these large rainwater tanks has allowed the Centre to save over 1,000 kilolitres of water per year, bringing their annual consumption from 2,644 kilolitres to 1,637 kilolitres. This represents a 38% reduction in mains water consumption.

### Assistance from Rous Water

Rous Water provided \$3,500 in rebates to the Summit Sports and Fitness Centre to support the installation of their rainwater tanks.

