Rous Regional Demand Management Plan 2023-2024: Annual report

Responsible Officer: Group Manager Planning and Delivery (Andrew Logan)

Recommendation

That Council receive and note the progress of demand management deliverables for the 2023-2024 financial year including budget expenditure

Background

The Regional Demand Management Plan (RDMP) describes the water supply demand management initiatives to be implemented by Rous County Council over a four-year period (2023 - 2026). The RDMP continues to deliver comprehensive water conservation programs throughout the region for both residential and non-residential users. The aim of the RDMP is to implement economically, socially and environmentally sound measures to achieve defined outcomes in water efficiency and conservation over the long term.

A key achievement in 2023/2024 was the successful completion of a region-wide standard definitions of connection types and the region-wide water supply connection policy and guidelines undertaken by Hydrosphere Consulting, with all constituent councils providing in-principal support. A key outcome of the water supply connection policy is that all new connections are individually metered. Once fully adopted and implemented by Rous and constituent councils, the data from the standard definitions of connection types will contribute to enhanced collection, evaluation and reporting, assisting in achieving greater effectiveness in demand management and provide meaningful information on the results achieved.

Our Regional Water Education Officer has broadened the reach of the water sustainability education program through engaging presentations and collaborations with schools, environmental organisations and libraries. The Australian curriculum was mapped to determine areas of overlap with Rous's key water sustainability messages and to guide the development of further educational opportunities. Presentations were met with enthusiasm, generating positive feedback and requests for future involvement. Complementary to this, a marketing campaign, utilising local media, social media, and community partnerships, significantly boosted participation in Water Night 2023.

A key challenge was the implementation of the Behaviour Change Pilot Program, which is designed to ensure sustained water efficiency behaviours for residential customers. A tender process in late October 2023 attracted one submission, and on assessment did not meet the objectives. Following a thorough evaluation process, it was decided to move forward with an internal staff member leading this initiative. This approach balances the expertise of external behaviour change specialists with the benefits of having a dedicated internal resource.

The natural disasters of 2022 have fostered a strong sense of community spirit, and we believe there is a high level of interest and willingness to participate in such programs that enhance community preparedness. A comprehensive delivery plan for the behaviour change program is underway, including identifying participants, gathering necessary educational materials, and scheduling initial community workshops. The program will be implemented during 2024/2025 and 2025/2026, with ongoing guidance and peer review from behaviour change experts.

Budget

The image below shows expenditure against budget for 2023/2024.

education & engagement	\$20K / \$35K =	58%
sustainable water partner program	\$139K / \$191K =	73%
data collection & monitoring	\$44K / \$60K =	73%
behaviour change pilot program	\$6.4K / \$15K =	40%
water tanks	\$20.5K / \$50K =	41%

Of particular note are the following:

- Education and Engagement Program (schools, community and residential program): advertising, social media, animation and educational resources.
- Sustainable Water Partner Program (non-residential program): If approved, carryover of the 2023-24 budget from the sustainable water partner program and the behaviour change pilot program will be used to fund the new position of a temporary community engagement officer to deliver these two programs until June 2026.
- Data collection and monitoring: The project was completed successfully and under budget.
- Behaviour Change Program (residential program): A comprehensive delivery plan is being prepared, including identifying participants, gathering necessary educational materials, and scheduling initial community workshops.
- Rainwater Tank Rebates Program (residential program): An underspend was experienced, reflecting customer demand. This is likely due to factors including current cost of living pressures and the very wet year.

A snapshot of actions under the RDMP for the 2023/2024 period as follows.

Education and Engagement

- Presentations to 13 schools including collaborations with environmental based organisations.
- Delivery of community events including agricultural shows, university open day and a community river festival.
- Collaboration with local libraries across LGAs to present 7 school holiday activity sessions.
- Positive feedback received regarding presentation concept and content. "Everyone loved it, the kids were able to get such a clearer understanding by seeing the flow and cause and effect"



Our very own Regional Water Education Officer, Alex Dowling second from the left, presenting at the Rivers Academy of STEM Excellence



Water Night 2023

 Impact: Increased national and local participation, improved water literacy, water

behaviours and awareness.

Media: Eleven social media posts; community

service announcements; radio

interviews; and Echo Newspaper articles.

 Rous employee photo competition with what-a-legend water saving tips.

Water Night national broadcast with the Rous Regional Water Education Officer, Alex being interviewed by Costa Georgiadis.



Sustainable Water Partner Program



- Eight Reflections Holiday parks have completed water efficiency projects supported by program rebates. A case study is provided at the end of this report.
- 14 fully funded water audits were conducted, and water efficiency plans were provided to all businesses except for the Ballina Pool where there were limited options for achieving further water savings.
- Across the other 13 businesses, water efficiency projects identified potential water savings of over 11 million litres/year, the equivalent of almost 4.5 Olympic swimming pools each year. Rebates of \$30,200 were paid to four businesses.
- ◆ The Sustainable Water Partner Program was selected by industry leading water advisory group, The Water Conservancy, to feature in their inaugural e-newsletter and on the Smart Water Advice webpage at Rous County Council Case Studies - Smart Water Advice

Rainwater Tank Rebate Program

% Applications by LGA

Lismore 59.1% Ballina 36.4% Byron 4.5% Richmond 0%

- ♦ 22 approved applications
- ♦ 8 internal toilet connections
- 6 laundry connections
- ♦ Reduced applications overall and changed trends regarding % of applications by LGA (increase in Ballina and reduction in Byron and Richmond in particular)

Smart metering

- The roll-out of smart metering is nearing completion with approximately 90% or 1900 smart meters being installed on customer services to the end of June 2024 with the remainder to be installed in July and August.
- Approximately 22% of customers have downloaded and are using the smart meter app to monitor their water usage and receive leak notifications.
- Council staff are using the smart meter data for leak detection and water loss management.







Water loss management program

Council is taking a proactive approach to managing its water supply network by investing in training and new technologies.

- Our operational staff have completed DPI training in the key areas of non-revenue water management, pressure management and active leak control.
- We have acquired acoustic leak detection equipment that uses ground-level listening devices to pinpoint leaks in the water supply network. This will allow for faster and more targeted repairs.
- A flow control and pressure management valve (a first for Rous) has been purchased to regulate flow and pressure within the network. This will help to minimise pipe bursts and water loss.
- Nine bulk flow meters have been purchased to be installed at strategic points throughout the water network. These meters will provide real-time data on water flow, allowing staff to quickly identify leaks and expedite repairs, reducing overall water loss. A tender has been issued for the install of the meters.

Water supply pricing

Rous County Council is currently assessing the option of a new consumption-based pricing model for its constituent councils. The proposed methodology will be run in parallel to the existing methodology for 18 months throughout 2024/2025 up until 31 December 2025, with the data to be provided to the constituent councils for further discussion. If adopted, the new methodology will provide further incentives to reduce water loss and usage.



Attachment

1. Reflections Holidays – A sustainable water partner case study



SUSTAINABLE WATER PARTNER PROGRAM



Reflections Holidays – A Sustainable Water Partner

CASE STUDY

WATER SAVINGS IN THE TOURISM ACCOMMODATION SECTOR

In 2020-2024 Reflections Holidays (Reflections) in partnership with Rous County Council and specialist consultancy Websters Group embarked on a collaborative project to investigate town water consumption, associated costs and a range of measures available to improve water efficiency at eight holiday parks in the Northern Rivers, NSW.

The first phase of this project focused on data collection to understand where and how water was used. Information was gathered several ways: reviewing billing, occupancy and customer data; conducting an onsite walkthrough assessment and taking flow measurements; and analysing real-time water consumption data obtained through the installation of temporary smart water meters.

Collating and analysing water-use data enabled the immediate identification of water loss through leakage. It also gave insight into feasible water-saving projects and upgrades to enhance efficiency.

A comprehensive water saving plan was then developed to prioritise activities and water-saving projects that Reflections agreed were feasible, cost effective and capable of delivering water-saving benefits to reduce both their environmental footprint and future costs.

These projects included:

- Immediate resolution of costly leaks;
- Upgrading showers in male and female amenities to WELS-rated water efficient devices:
- Installing ongoing, permanent smart metering to detect water leaks long-term.

The water-saving plan identifying these projects was funded through Rous County Council's Sustainable Water Partner Program.

This work encompassed all levels of the Reflections business, from their Executive Team to individual Park Managers at eight sites between Brunswick Heads and Evans Head, stretching across Byron Bay, Ballina, and Richmond Valley Shires.

Reflections Holidays
is a proud participant of
Rous County Council's
Sustainable Water
Partner Program.
Rous County Council has
recognised Reflections
for its commitment
to water efficiency,
achieving significant
water savings as well as
reducing their water bills.



PROJECTS & ACHIEVEMENTS - WATER EFFICIENCY AND COST SAVINGS









Achievements - Water efficiency & cost savings

Locating and fixing leaks was an immediate focus of this project, generating significant water and cost savings. Acknowledging the importance of timely leak detection, Reflections have since installed permanent smart water meters at all sites across their NSW footprint.

Upgrading guest showers was another priority. Exploratory work took place to identify benefits, challenges and potential risks associated with any upgrades to shower head fittings. Extensive customer testing and feedback was gathered through a pilot project to determine the best options for a positive and water-efficient customer shower experience. The recommendations from this investigation led to the upgrade of 330 shower roses each at a 6.5 litre/minute 4 WELS Star flow rate. This is comparable to older style shower heads that can use up to 20 litres per minute.

On completion of these projects, a potential annual water saving of up to 8.9 million litres per year was achieved. The water saved was equivalent to almost four Olympic swimming pools, equating to more than \$55,000 of annual savings in water, sewer, trade waste and energy consumption.

Factoring the work cost and rebates available through the Sustainable Water Partner Program, a return on investment will be achieved in only one year.

Given the outcomes, there are plans for this project, focusing on water savings in the Northern Rivers, to be replicated at other Reflections parks across NSW. This rollout will see even greater long-term water savings achieved.

This project was a catalyst for Reflections to enhance visibility of water consumption and potential losses at all of our holiday parks across NSW. The initial water efficiency investigations led to immediate actions as well as long-term projects that will not only reduce our water footprint but our energy consumption as well. This project aligns with Reflections' broader sustainability commitment to attain B Corp Certification (social, environmental, and governance best practice for business) by 2030.

Cameron Tynan, Reflections Executive Manager - Property Development & Planning

The Sustainable Water Partner program is an important contribution to firming regional water demand and securing our regional water supply. The project with Reflections is a leading example of testing water management options within a sample of sites and then applying learnings at scale.

Ryan Dillon, Websters Group, Managing Director





REFLECTIONS HOLIDAYS

Reflections Holidays manages 40 holiday parks and 45 community reserves on NSW Crown Land. Reflections is committed to protecting and preserving sites under their management and seeks to incorporate water saving measures into various amenities and facilities as it builds on the sustainability focus of its business.

www.reflectionsholidays.com.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 local businesses support through planning and rebates to implement water saving projects. Contact Rous County Council for Terms and Conditions.



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 Reflections Holidays.

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

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