



# *Water for Life 2050*

**SUSTAINABLE WATER MANAGEMENT FOR OUR GROWING COMMUNITY**

Richmond  
Valley  
Council





Richmond Valley Council acknowledges the people of the Bundjalung Nation as custodians and traditional owners of this land. We value and appreciate their living culture, continuing connection to land and waters and their unique role in the life of this region in the past, present and future.

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### **Front Cover: *A Good Drop***

RVC Water Team members Allison Hawthorne, Robert Grill, Coby Clapham and David Cash keeping an eye on water quality at the Casino Water Treatment Plant. Council received the 2021 Best Tasting Tap Water in Australia Award for water produced at this facility.







## *Protecting our precious water resources*

The Richmond Valley is the rural heart of the Far North Coast, and our landscape has been shaped by the changing rhythms of the Richmond River.

River systems are the lifeblood of our land, sustaining our beautiful and diverse environment, supporting agricultural enterprise and providing essential drinking water for our communities. They have defined our identity for thousands of years, and will continue to sustain us in the future, if we plan carefully to protect and improve our catchment and to manage our water usage responsibly.

We know that the pace of change in our region is increasing, bringing challenges and opportunities for the future. More people are being drawn to the Richmond Valley and the local way of life, more businesses will be established, and more homes and services will be needed. Our climate will also continue to change, with higher temperatures, longer periods of drought and more frequent flooding events. In the face of these challenges, we will need to find new ways to adapt and live sustainably within the landscape.

This Plan sets a pathway to enhance, preserve and manage our community's water resources, as we continue to support sustainable growth in the Richmond Valley for the next 25 years.



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# PLANNING A SUSTAINABLE FUTURE

## *A message from the Mayor and General Manager*

Water is our community's most precious resource. It sustains the life of our Valley, defines our local communities and underpins our regional economy. Our future depends on responsibly managing our local and regional water supplies. We must plan for the needs of this generation and the next to ensure that our communities can continue to grow and prosper, while protecting the environment and the landscapes that we love.

Our Water for Life 2050 Strategy brings together the projects we have commenced in the 2020-24 Council term to lay the foundations for future water security and responsible sewerage management in the Richmond Valley. Despite the challenges of the 2022 floods and our ongoing recovery program, Council has continued to work towards our community's long-term vision for growth and to carefully plan for the essential infrastructure that we will need for the future. Our water strategy builds on these foundations to set a pathway for the next 25 years, with plans to invest more than \$200m by 2050. This is our council's legacy to the Richmond Valley community, and we trust that it will be carried forward for the benefit of future generations.

While the main focus of this strategy is investing in Council's water and sewerage operations for the future, Water for Life 2050 also works in partnership with our Sustainable Communities

Strategy, to address the broader role that Council plays in preserving our local rivers, beaches and wetlands. Protecting the health of our catchment and river water quality is fundamental to our future town water supplies. Both strategies will help to inform future iterations of our Community Strategic Plan, Resourcing Strategy and Delivery Program, to ensure that we fulfill our commitment to build and operate more sustainable water and sewerage systems and protect our environment.

2050 may seem like a long way away, but the assets that we build today will serve our community for the next 50-100 years. It is important that we invest wisely, take time to consider the options and develop infrastructure that is fit for purpose, adaptable and cost-effective. Some of the most critical infrastructure investments for our community will occur over the next five years, with the replacement of the Casino Sewage Treatment Plant (STP), completion of Stage 2 of the Evans Head STP, upgrade of the Casino Water Treatment Plant and commencement of our water security projects. These projects will support our vision to grow the Richmond Valley's population by an additional 4000 by 2040, provide up to 1900 new jobs through the Regional Jobs Precinct and deliver up to 2000 new homes on flood



*Richmond Valley Mayor Robert Mustow and General Manager Vaughan Macdonald*

safe lands for local families. It is an ambitious plan, but one that we can achieve through active partnerships with Federal and State governments and continued funding support.

As we progress towards 2050, we will learn more about the impacts of our changing climate, discover new technologies to improve our water and sewerage infrastructure and harness further opportunities to enhance performance and attract new investment. This strategy marks the start of the journey. Each new council will add to its direction over the coming years, to ensure that our community can continue to enjoy the benefits of water for life.



# ABOUT THE RICHMOND VALLEY

The Richmond Valley Council local government area covers some 3,150 km<sup>2</sup> and extends from the coastline at Evans Head to the foothills of the Great Dividing Range to the west. The Bundjalung People are the traditional custodians of this land.

Most of the Valley's rolling hills and fertile river plains are devoted to agriculture, interspersed with State forests, national parks and nature reserves.

The largest town is Casino, with a population of 11,000. Other communities include Broadwater, Rileys Hill, Coraki, Evans Head, New Italy, Woodburn and Rappville, as well as rural areas.

**TOTAL AREA 3,150km<sup>2</sup>**  
**38 KM OF COASTLINE**



## POPULATION

Population - 23, 589

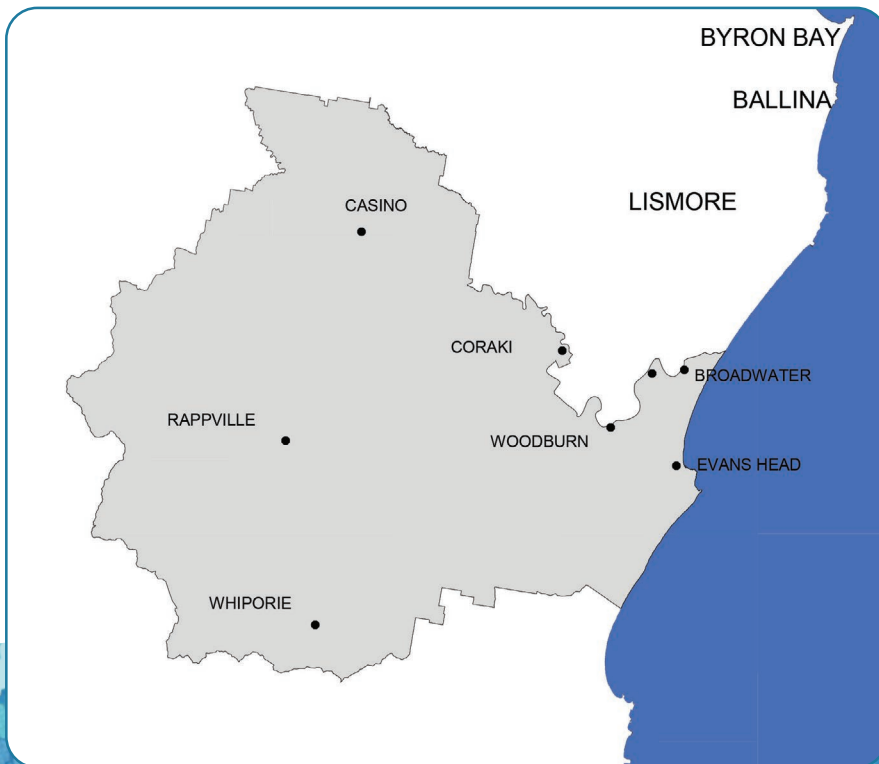
Number of houses - 10,970



## ECONOMY

Local jobs - 7922

Annual production - \$900m+





# OUR WATER AND SEWERAGE NETWORKS

Richmond Valley Council manages water and sewerage networks within our community, in partnership with Rous. Rous provides bulk water supply for the Mid-Richmond villages of Coraki, Broadwater, Rileys Hill, Woodburn and Evans Head. Council manages the water supply for the Casino township.



## WATER CONSUMPTION

**7,386**

Connected properties

**2019-2023**

**Average water consumption**

Casino: 2,108ML

Mid Richmond: 622ML



## WATER

**1** - Raw Water Pump Stations

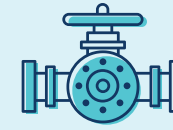
**1** - Water Treatment Plants

**13** - Reservoirs

**8** - Pump Stations

**203KM**

Pipeline (mains and reticulation)



## SEWER

**4** Sewage Treatment Plants

**34** Sewage pump station

PIPELINE

**44km** Rising Mains

**145km** Gravity Mains

**8km** Pressure Sewer Mains



# KEY STRENGTHS, CHALLENGES & OPPORTUNITIES

*Looking ahead to 2050, there are a number of challenges that we will face in sustainably managing the community's water and sewerage networks.*

*There are rapidly changing times in regional NSW, but with these changes will come new opportunities. The Richmond Valley is well placed in a growing region, with potential to build the strategic capacity of Council's water and sewer operations and achieve economies of scale. Through careful planning, we can leverage our key strengths, harness the benefits of economic growth and effectively manage emerging risks.*

## *Our Key Strengths*

### **A great place to live**

The Richmond Valley's beautiful beaches, rivers and landscapes are a great attraction for residents and visitors alike. Combined with a relaxed lifestyle, progressive community, job opportunities and more affordable housing prices, we can confidently expect that our community will continue to attract new residents and investment.

### **A connected region**

Located some two hours from Brisbane and the growing communities of South-East Queensland, the Valley is in easy reach of emerging investment markets and has access to major transport links, larger services and suppliers.

With an easy drive between the major centres of the Northern Rivers, many people commute for work across the region, providing opportunities to draw our workforce from beyond our boundaries.



## Growing employment base

We have strong well-established agricultural and manufacturing industries, with opportunities to continue to expand and value-add. These 'engine industries' will form a solid foundation as we continue to diversify our local economy through government-led initiatives such as the Regional Jobs Precinct. New housing development and increased tourism will drive service industry growth. An additional 1900 job opportunities will be created by 2040.

## Consolidated development

The Valley has substantial flood-safe lands north-west of Casino, with major employment centres nearby. This area can accommodate the Valley's main development demand over the next 25 years, with an additional 1600 homes anticipated by 2040 and further development opportunities beyond this stage. The opportunity to consolidate major greenfield development at Casino will allow for more cost-effective servicing and greater confidence in long-term infrastructure planning.

## Regional partnerships

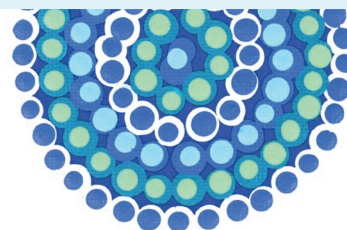
Richmond Valley Council's membership of Rous County Council allows us to harness the strategic capacity of a regional organisation, reducing our capital investment costs, providing greater access to resources and economies of scale, and more options to manage water security risks.

## Robust planning

Over the past three years, Council has been building its long-term strategic plans for growth and investment in the Valley. With completion of the Richmond Valley Growth Management Strategy, Regional Jobs Precinct Masterplan and the 2040 Community Strategic Plan, we have a clear picture of how we can shape the future of our Valley, with well managed growth in our urban areas and increased employment opportunities. This allows us to develop evidence-based projections of future water demand and a clear understanding of the essential infrastructure that will be required for our community's future growth.



*RVC's Environment Engagement Officer Allana Clifford takes a water sample at the Casino STP.*





# KEY STRENGTHS, CHALLENGES & OPPORTUNITIES

## Challenges

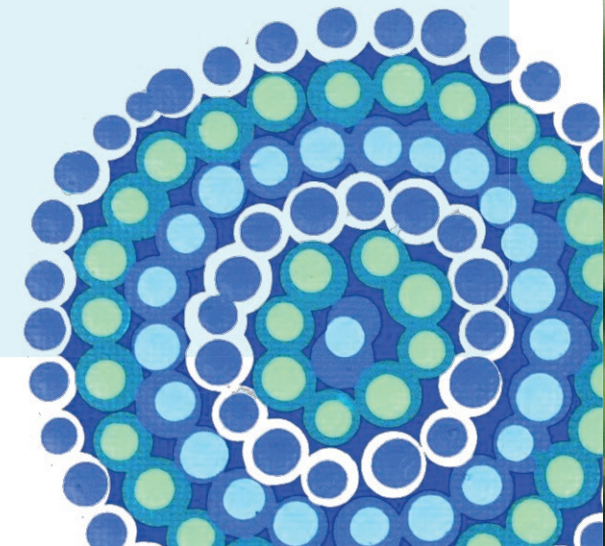
### Adapting to a changing climate

Our climate is changing and we need to adapt to new challenges and constraints. We know that temperatures will increase and there will be longer droughts and more bushfires, along with more frequent storms and flooding. This means we need to plan, build and respond differently in the future to ensure our community is safe and our essential water/ sewer infrastructure is resilient and sustainable. There are two significant climate risks to our water and sewerage systems over the next 25 years: Reduced water security for our Casino community, through climate impacts on the Richmond River supply, and increased risk to our sewerage networks in the Mid Richmond from more frequent flooding events. Addressing these risks will require careful planning and substantial investment.


### Facing a less predictable future

In the past, water management planning was a long-term exercise. Councils in regional NSW could plan ahead for more than 50 years, with reasonable confidence in what the future would be like, with slow, consistent population growth and a steady pace of new development. The last five years have seen the pace of change increase for regional communities and it is harder to predict what will happen in the future. Five years ago, we couldn't have imagined that a global pandemic would accelerate population shift to the Richmond Valley, increase labour shortages and ultimately double the cost of providing infrastructure. Neither did we expect to experience a natural disaster on the scale of the 2022 flood. These changes have shown us that we need to become more agile in the way that we plan for long-term water management. In response, Council has shortened its planning

period to 25 years and increased the revision cycle to at least every four years, in line with the Integrated Planning and Reporting cycle. This will help to ensure that we are still on track with our key directions and can adapt quickly to any new challenges or opportunities.





A close-up photograph of water spraying from a nozzle, creating a dense curtain of fine droplets. The water is falling over lush green foliage, which is slightly out of focus in the foreground. The background is a soft, blurred mix of green and brown, suggesting a natural outdoor setting.

## Addressing single water source risks

Our main population centre, Casino relies on a single source for its water supply, with the town's water being extracted from the Jabour Weirpool on the Richmond River. Studies have shown that there are limited alternatives to the river, with nearby groundwater sources being of insufficient volume and quality to provide the large amount of water that the town uses each year – about 2000 million litres. The Richmond River catchment is an unprotected catchment – with high impact from farming, industry and human settlement. This puts water quality under stress and there is greater potential for micro-organisms, such as cryptosporidium, to find their way into our water supply. Unless there is a major change in the way the catchment is managed, we can expect that water quality in the river will continue to decline over the next 30 years. With the additional impacts of climate change, and potential extended periods of low river flow, more risks will be introduced – such as increased algal blooms. To meet this challenge, we need to do three things: Improve water security; ensure our water treatment processes are robust and reliable, and ultimately look for other water sources to help off-set the long-term risks of the Richmond River supply.



# KEY STRENGTHS, CHALLENGES & OPPORTUNITIES

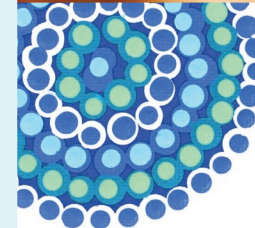
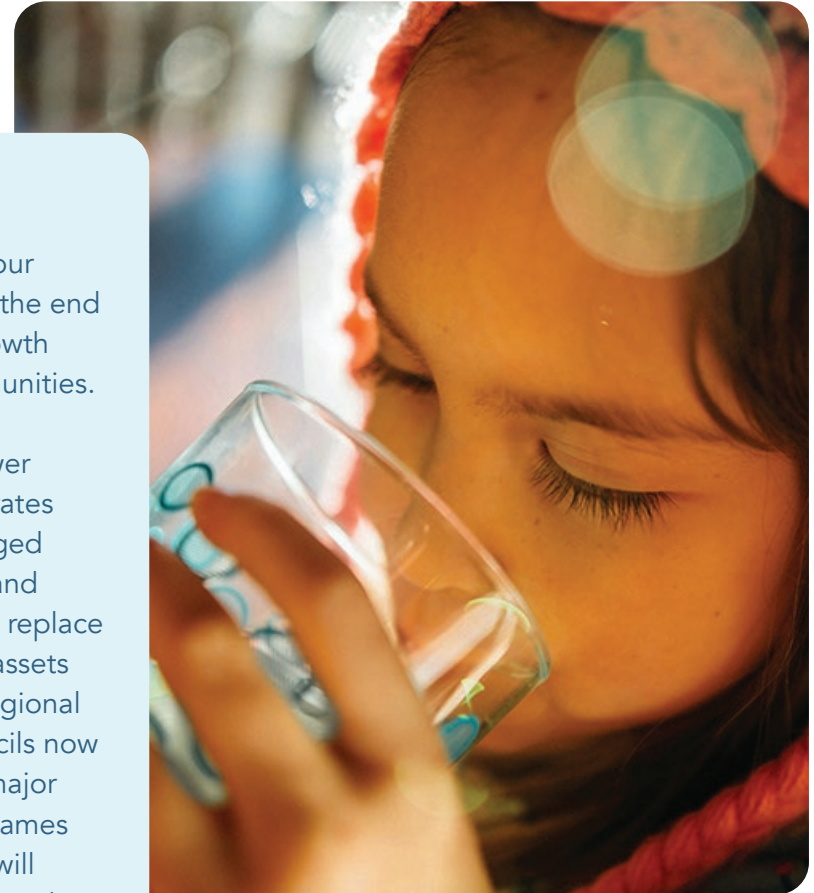
## Challenges

### Escalating costs and reliance on grants

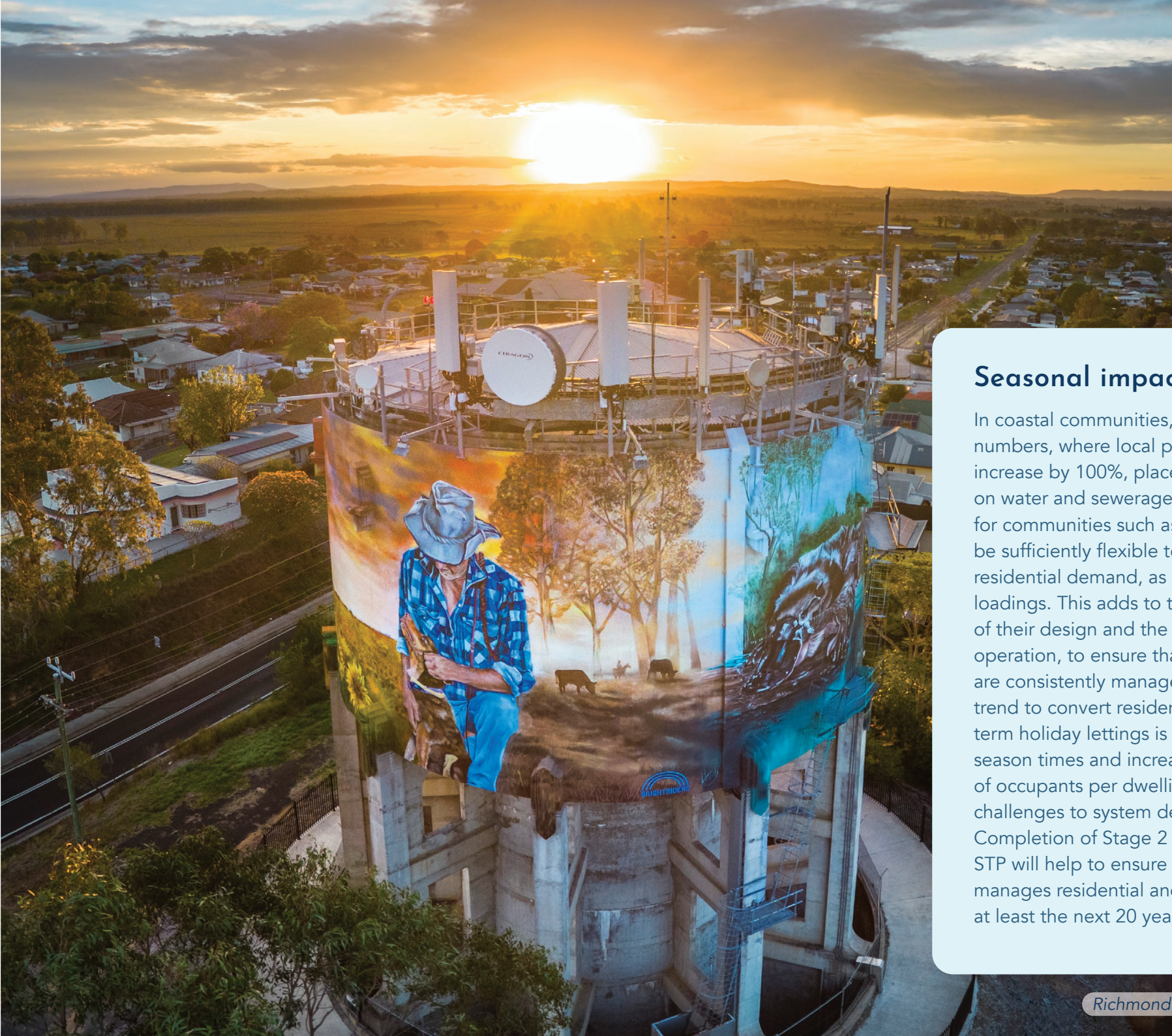
Since the COVID pandemic, construction materials and labour costs have continued to escalate. This affects Council's capacity to plan for major infrastructure augmentation and replacement over the longer term. In the past five years, the cost of developing key infrastructure has increased by up to 100%, leaving a shortfall in funding reserves set aside for these projects. Although Councils have the option of borrowing funds to deliver their projects, there are limits on the amount that we can borrow and the way we configure our loans to fund long-term assets. This essentially means that the current generation carries most of the cost of providing assets for future generations. Councils throughout NSW are now turning to State and Federal governments for assistance with infrastructure funding and there is strong competition for limited resources. Our community will depend on government funding to deliver many of the capital works included in this strategy.

### Aging infrastructure

Like many regional communities in NSW, our major infrastructure is aging and reaching the end of its asset life. This is due to historical growth and investment patterns in regional communities. Government decentralisation schemes in the 1970-80s saw an increase in water/sewer infrastructure, followed by slower growth rates than anticipated. This meant that assets aged in place, with limited need for expansion and limited resources for councils to ultimately replace them. Fifty years on, the demise of these assets is coinciding with accelerated growth in regional areas in the post-pandemic exodus. Councils now find themselves with increasing costs for major asset replacement and more urgent timeframes in which to achieve it. The next five years will see more than \$75m invested in replacing and augmenting our two most critical sewerage assets, with up to \$20m required for first-stage water security and quality improvements.







## Seasonal impacts

In coastal communities, peak season tourist numbers, where local populations can increase by 100%, place additional demands on water and sewerage networks. Systems for communities such as Evans Head have to be sufficiently flexible to manage every-day residential demand, as well as peak holiday loadings. This adds to the complexity of their design and the expense of their operation, to ensure that environmental risks are consistently managed. The increasing trend to convert residential homes to short-term holiday lettings is extending peak season times and increasing the number of occupants per dwelling, adding further challenges to system design and operation. Completion of Stage 2 of the Evans Head STP will help to ensure this system efficiently manages residential and tourism growth for at least the next 20 years.



# KEY STRENGTHS, CHALLENGES & OPPORTUNITIES

## Opportunities

### Greater strategic capacity

While continued growth can present challenges, it also presents a wide range of opportunities. Increased employment, services and housing helps to boost the local economy and provides options for economies of scale. There are more customers to share the cost of constructing, operating, and ultimately replacing water and sewerage assets. Consolidating greenfield development in growth precincts will allow for the most cost-effective servicing strategies and these new developments will contribute towards the cost of infrastructure that benefits the whole community. The planned expansion of the urban population to 2040 and beyond will take Council's water and sewerage business to the next stage of development (>10,000 connections), ensuring the long-term sustainability of these essential services and increasing Council's capacity to attract resources and achieve efficiencies.

### Improved environmental performance

Carefully planning capital investment in water and sewerage assets over the next 25 years provides opportunities to implement new technologies and design to improve the environmental performance of our systems. Council's older sewerage assets, such as the Casino STP, date back to the 1930s, providing only basic levels of treatment. Our planned long-term program of investment will see these outdated technologies progressively replaced with superior tertiary treatment systems, returning a better standard of treated effluent to the environment and opening opportunities for future agricultural or industrial reuse.

Similarly, taking a long-term view of our community's future water supply requirements, allows us to plan strategically for more efficient water usage and reduce the impacts on our local waterways. The key direction for this strategy is responsible, sustainable use for this generation and the next.



RVC's Open Spaces team member, Lachlan Troy assessing the water quality of the Richmond River.





## Regional scale risk management

Council's relationship with Rous means we can look outside our boundaries to help address our long-term water security challenges. Our Mid Richmond communities currently enjoy a high level of water security, with access to the Rocky Creek Dam supply via the Rous network, and a second local supply, via the Woodburn bore field, for drought security. Rous will be further developing this supply in the coming years. There is also opportunity to consider a future connection to the Rous system for Casino, ensuring a much-needed second water source for the town.



Where do we want to be?

# GROWING OUR COMMUNITY BY 2040



+4000 increase in population



+2000 new homes



+1900 new jobs



+187ha of additional industrial land



## Stronger, more sustainable communities

In 2023, Council worked with the community to develop a shared vision for the future, in the wake of the devastating 2022 floods. This vision formed the basis for our Richmond Valley 2040 Community Strategic Plan, which sets an ambitious growth agenda for the next 20 years, including more people, housing, jobs and green spaces. It also includes key directions to ensure that our communities are sustainable, that we adapt to a changing climate, protect our environment and use natural resources wisely. Our challenge is to deliver our vision for growth while still preserving the things that we value the most about our Valley – our landscapes, local identity and sense of community connection. Sustainably managing our water resources in the future will be essential to achieving this vision.

Without sufficient water and well-managed sewerage services, we cannot provide for the new industries we hope to attract through the Regional Jobs Precinct and other investment opportunities, or the new homes we hope to provide on flood-safe lands. Beyond the first stage of growth, effective water management will become even more important, as we work to sustain a larger population in a changing climate, and continue to strengthen our role in the Northern Rivers as an emerging employment centre. Our Water for Life strategy plans beyond the CSP vision for a further 10 years and each revision of the plan will move the timeframe forward, so we are always well ahead with our infrastructure planning.





## WHAT WILL HAPPEN BEYOND 2040?

Our community has set an ambitious growth target for 2040. But we need to plan beyond this point for our water and sewerage assets. These assets can be in service for up to 100 years and they can take up to 10 years to plan, design and build. We must plan well ahead for our essential infrastructure needs, while keeping pace with a rapidly changing environment.

### WHAT DO WE KNOW ABOUT THE FUTURE?

#### Two-speed growth

Council's Growth Management Strategy, Place Plans and flood studies all indicate that Casino will continue to grow at a faster pace than the Mid Richmond and surrounding rural areas in the foreseeable future. This is because there are many constraints on the lower river communities and our rural settlements, due to flooding, environmental protection and significant agricultural lands.

We know that there is enough flood-safe residential land in Casino for the next 50 years – with future-release greenfield sites providing potential for another 4000+ homes and potential to grow the population beyond 20,000 by 2070. But there are a lot of unknowns in this scenario. Achieving this growth will depend on whether there are enough jobs, essential services, facilities and infrastructure to attract new people

to the town and support a population of this size. Although we don't know all the answers yet, we need to plan for this level of growth when designing our future water and sewerage networks and revise our plans as more information becomes available. In the Mid Richmond, Council expects that the population will increase slowly over the next 50 years, with the greatest growth in Evans Head. Constraints on surrounding lands will mean that growth will occur gradually through increasing density, rather than greenfield development. It is expected that Evans Head will continue to be a popular tourist destination, with demand for holiday accommodation and peak season visitor numbers increasing. Although Council expects that the current upgrades will be sufficient for the life of this strategy, we will need to monitor growth patterns in the Mid Richmond to determine if further augmentation is required.







## New technologies and requirements

We also know that new technologies will continue to be developed over the life of this strategy, with greater automation of water and sewerage assets and improved performance of treatment systems. Gaining the best advantage from these improvements will require careful planning and adaptable infrastructure design. Regularly reviewing our strategy will help to ensure that we keep up to date with technological advances.

We also expect that regulatory requirements will continue to increase in the future. Local water utilities in regional NSW are subject to high levels of regulation from multiple NSW government agencies, to ensure that public health and the environment is protected. We will need to prepare for higher standards of water treatment and improved performance from our sewage treatment plants to meet these requirements.







## WHAT IS UNKNOWN IN OUR FUTURE?

### Long-term impacts of climate change

Although we have a reasonable understanding of how climate impacts will continue to affect our community over the next 20 years, beyond that, the scenarios become harder to predict. We expect that, as is currently occurring, temperatures will increase and there will be longer periods of drought and more frequent bushfires, storms and flood events – but putting metrics around how long, how frequent and how severe these events will be is more challenging. Erosion impacts along our coastline will also continue, but it may be another 80+ years before we start to see the direct effects of sea level rise and tidal inundation on infrastructure. The NSW Government has recently developed a State Disaster Mitigation Plan and will be creating a series of regional adaptation plans over the next two years. This should help

to improve our understanding of potential future impacts. Councils will also be required to prepare local adaptation plans and we are currently piloting some options for this planning in the Mid Richmond communities. As we progress through the life of this strategy, we will continue to learn and understand more about the future impacts of our changing climate and revise and adapt our plans accordingly.

### Future funding assistance and governance

Council has planned major investment in water and sewer infrastructure over the next 25 years, with the expectation that other levels of government will continue to support local councils with essential funding for large-scale capital works. While partial funding has been secured from the NSW Government for some of our major works over the next

five years, we are yet to secure funding for our largest project – the redevelopment of Casino STP. Beyond 2030, funding sources and opportunities are unknown. The NSW Productivity Commissioner is currently reviewing future funding models for local water utilities in regional NSW, with a view to improving their long-term sustainability.

Twenty-five years is a long time to plan ahead, and we also don't know whether there will be further changes to local government in that time. The NSW Government might change local council boundaries again or review our range of responsibilities. It's hard to predict these changes. Council can only plan for what we think will happen, monitor the changes, and continue to advocate strongly for government investment in our community's water and sewerage infrastructure.



# BUILDING OUR VISION

Council began planning for accelerated growth in the Richmond Valley from 2021, with the announcement of the Regional Jobs Precinct initiative. Since our journey began, we have carefully laid the foundations for long-term sustainable growth and investment with a series of strategic plans and studies. Our Water for Life 2050 strategy is one of the final components.

## RJP MASTERPLAN

We began planning for the Regional Jobs Precinct, in partnership with the NSW Government in 2021. This includes detailed investigation to support investment in three industrial precincts in Casino. The final Masterplan is due in mid-2024, with the RJP expected to ultimately create 1900 jobs.

## RV GROWTH MANAGEMENT STRATEGY

Council completed its Growth Management Strategy in 2023 to determine where future residential and commercial growth could occur. This included major greenfield housing sites near Casino. The Strategy is supported by Place Plans, which identify how we can enhance the unique identity of our growing towns and villages.

## SUSTAINABLE COMMUNITIES STRATEGY

Council then considered how we could accommodate future growth while living sustainably within our unique environment and adapting to a changing climate. Our Sustainable Communities Strategy was adopted by Council in 2023.



## KEY ECONOMIC DIRECTIONS

We also commissioned economic analysis, to consider how to develop our engine and emerging industries in the future – supporting increased tourism, exploring more opportunities for agricultural enterprise and growing our service industries.

## RICHMOND VALLEY 2040

The next stage was to bring the key directions from all these plans together into the Community Strategic Plan, to develop a vision for the future in consultation with our community.

Our Richmond Valley 2040 CSP was adopted by Council in June 2023, with the first actions from the Plan included in the 2023-25 Delivery Program.

## INFRASTRUCTURE STRATEGIES

One of the final stages of our planning is to determine how we will provide the essential infrastructure our community needs to accommodate its vision for growth over the longer term, while managing our resources sustainably. Our Water for Life 2050 strategy is a key component of these plans, detailing how we will secure our water supply and develop our water and sewerage services over the next 25 years.



## BRINGING OUR PLANS TOGETHER

Water for Life 2050 sets objectives and actions to respond to our community's future water and sewerage needs. The strategy connects with the NSW Government's plans and requirements and also links to Council's strategic plans and delivery systems. The diagram below shows how it all fits together.



### NSW GOVERNMENT STRATEGIES

- State Water Strategy
- Regional Water Strategy
- North Coast Regional Plan
- NSW Disaster Mitigation Plan



### NSW REGULATION

- Local Government Act
- Water Management Act
- Public Health Act
- EPA Licencing
- Water Sharing Plan
- LWU Regulatory & Assurance Framework



### RVC STRATEGIES

- Community Strategic Plan
- Growth Management
- Sustainable Communities
- Economic Development
- RJP Masterplan
- Place Plans
- Water/sewer technical studies



### RVC PLANS

- Delivery Program
- Asset Management Strategy & Plans
- Long-term Financial Plan
- Workforce Strategy
- Operational Plan



# FUNDING AND DELIVERING OUR PROJECTS

## Investing \$200m+ in our future

Our water strategy sets an ambitious path for water and sewer investment to 2050, with more than \$200m in capital works planned within the first 15 years. Council will use a variety of funding sources, including Federal and State Government grants, RVC water and sewer reserves, water & sewer charges, developer charges and loan borrowings to support this program.

So far, we have received partial funding from the NSW Government's Safe and Secure Water Program for water security and quality improvement works in Casino and Stage 2 of the Evans Head STP. Council has also submitted applications to the Federal Government for funds to help investigate future connection of Casino to a second water source (Rous) and to help investigate and design the new Casino STP. However, the majority of the Casino STP project remains unfunded and Council will continue to advocate strongly for construction funding over the coming years.

We will also seek further government funding to construct our medium and long-term water security options for Casino.

## Staged delivery through IP&R

Our Water Strategy aligns with the Integrated Planning and Reporting Framework (IP&R), required under the Local Government Act 1993. IP&R is the central operating system which drives the strategic planning, resourcing and delivery functions of every council in NSW.

When each new council is elected, one of its first tasks is to review the Community Strategic Plan (CSP) in consultation with the community. In reviewing the CSP, Council will draw on its long-term strategies, including the Growth Management Strategy, Sustainable Communities and Water for Life 2050.

The Community Strategic Plan helps to inform the Council's Delivery Program and Operational Plans. These plans set out how Council's activities and resources will be directed towards delivering the community's priorities during each term of office. To ensure that the actions from our Water for Life 2050 strategy are implemented, we will divide our long-term work programs into stages to inform each new Delivery Program over the life of the strategy. The diagram on the next page shows how it all fits together and how we will report to the community on our progress in delivering these projects.

## Funding Sources

### Australian Government

Grant applications have been submitted to:

- National Water Grid
- Regional Precincts & Partnerships program

### NSW Government

- Safe & Secure Water Program (Casino Water Security & Quality improvements, Evans Head STP Stage 2)
- Regional Development grants
- Bushfire Local Economic Recovery Fund (Rappville sewerage scheme)

### Richmond Valley Council

- Water & Sewer Fund reserves
- Water and sewer charges
- Development contributions
- Loan borrowings



## COMMUNITY STRATEGIC PLAN

Our strategy is informed by the Community Strategic Plan. Regular reviews of the Strategy help to inform future CSPs

## WATER FOR LIFE 2050

**STAGE 1**  
**2021 - 2025**

**STAGE 2**  
**2025 - 2029**

**STAGE 3**  
**2029 - 2033**

Import actions to each  
new Delivery Program

**DELIVERY PROGRAM**

Report on  
progress every  
6 months





**STAGE 4**  
**2033 - 2037**

**STAGE 5**  
**2037 - 2041**

**STAGE 6**  
**2041 - 2045**

**STAGE 7**  
**2045 - 2049**

Report on achievements at the end of each Council term

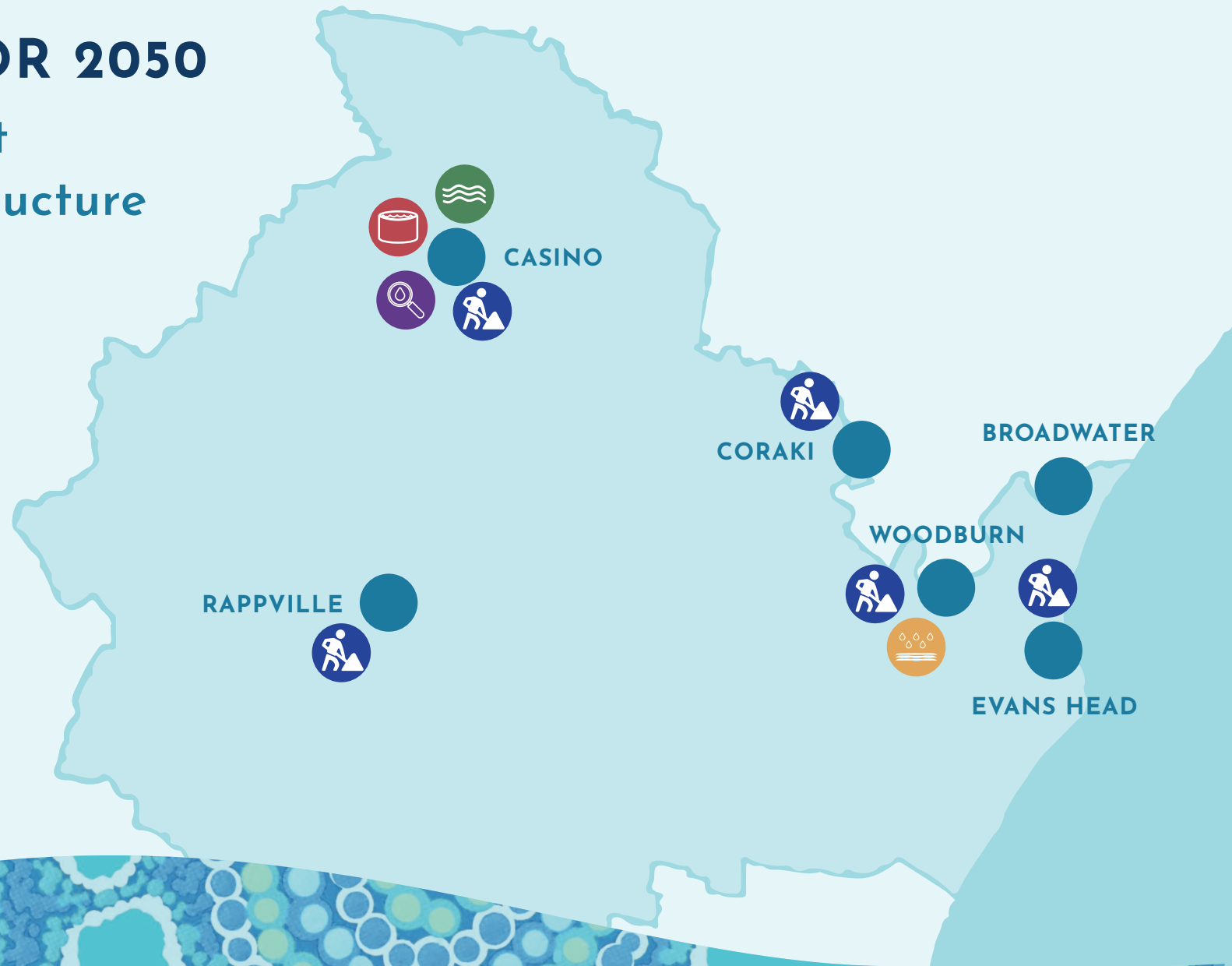
Review water strategy at the start of each new Council term





# DELIVERING OUR VISION FOR 2050

\$200m+ investment  
in essential infrastructure





## WATER SECURITY



Weir Pool improvements



Off-stream storage investigation



Second water source investigation



Groundwater development

## MAJOR PROJECTS



Casino STP Replacement

Evans Head STP Stage 2

Casino WTP upgrade

Rappville Sewerage Scheme

Woodburn Groundwater Scheme  
(Rous)

Coraki STP upgrade

## WATER CONSERVATION AND ENVIRONMENTAL PROTECTION



Target Leakages



Community Awareness and Education



Reduce Water Use



Catchment Management



Reduce inflow and infiltration



Asset Renewals and upgrades



Climate change resilience





# KEY PROJECTS

2025

2029

2033 ▶

## STAGE 1

**Casino Water Security**  
Study & options

**Casino WTP upgrade**  
Investigation & options

**Casino network expansion**  
(RJP & Sth Fairy Hill)  
Design

**Woodburn Borefield expansion**  
(Rous)

**Casino STP redevelopment**  
Investigation & options

**Evans Head STP Stage 2**  
Options & design

**Rappville Sewerage Scheme**  
Design & Construct

## STAGE 2

**Casino Water Security**  
Construct weirpool deep extraction  
Investigate medium-term options  
Investigate connection to Rous network

**Casino WTP upgrade**  
Design & construct

**Casino network expansion**  
(RJP & Sth Fairy Hill)  
Construct

**Smart metering roll-out**  
Mid Richmond

**Woodburn Groundwater Scheme**  
(Rous)

**Casino STP redevelopment**  
Design & construct

**Evans Head STP Stage 2**  
Construct

**Coraki STP & SPS**  
Performance improvement  
investigation

## STAGE 3

**Casino Water Security**  
Construct preferred medium-term  
option (off-stream storage or weir  
raising) Further investigate connection  
to Rous network

**Casino North Reservoir 1  
replacement**  
Design & construct

**Casino South water network**  
Water pressure improvements

**Smart metering roll-out**  
Casino

**Coraki STP & SPS improvements**  
Design & construct



2037

### STAGE 4

**Coraki reservoir replacement**

Design & construct

**Water assets**

Electrical & automation upgrade

**Casino sewer pump station upgrades**

**Sewer assets**

Electrical & automation upgrade

2041

### STAGE 5

**Casino connection to Rous network**

Design (subject to feasibility)

**Mid Richmond water supply improvements**

Investigation

**Sewerage network**

**Resilience & performance improvements**

**Sewer mains relining program**

2045

### STAGE 6

**Casino connection to Rous network**  
**Construct**

(subject to feasibility)

**North Casino Reservoir 3 replacement**

Investigation

**Coraki high level tank replacement**

Design & construct

**Rileys Hill STP**

Capacity review

2049 ▶

### STAGE 7

**Water reservoir integrity assessments**

**Water network**

Electrical & automation upgrade

**Casino STP & Evans Head STP**

Capacity review



# OUR FIVE KEY DIRECTIONS



Based on the key directions for long-term growth identified in the Community Strategic Plan, Regional Job Precinct Masterplan, and Council's water/sewer strategic planning and technical studies, we have developed five key directions for our Water for Life 2050 strategy. These directions create the framework for the objectives, strategies and actions that will help to deliver our goals and priorities.

## 1. SECURITY

**Ensuring there is enough water for the future**

This direction focuses on securing our town water supplies for Casino and the Mid Richmond in a sustainable manner that protects our environment. It also aims to ensure that there is sufficient capacity and pressure in our water networks and that our customers use water wisely and efficiently.

## 2. QUALITY

**Ensuring our water is safe to drink**

The key focus of this direction is improving our water treatment processes and ensuring that the water supplied to our customers consistently meets the Australian Drinking Water Quality Guidelines.

## 3. SUSTAINABILITY

**Providing modern, fit-for-purpose sewerage systems**

This direction focuses on Council's five sewage treatment plants and the need to upgrade, replace and improve the environmental performance of our sewerage infrastructure over the next 25 years. This area involves the largest amount of capital expenditure, with more than \$82m in the next five years.



A photograph of two people kayaking on a pond. The pond is covered with lily pads. One person is in a red kayak on the left, and another is in a blue and white kayak on the right. The background shows a line of trees and a grassy bank.

## 4. EFFICIENCY

### Managing our water business cost-effectively

Council needs to ensure that its water/ sewer business is sustainable over the long term and can continue to offer quality, value for money services to its customers. This direction looks at how we will manage our resources responsibly and improve performance.

## 5. PARTNERSHIPS

### Working with our community and regional stakeholders

This direction recognises the importance of working in partnership with our community to further develop and deliver our strategy. It also focuses on building strong relationships with our regional delivery partner, Rous and working collaboratively with our state regulators to help deliver our ambitious capital works program over the life of the strategy.



### Objective #1

# SECURE OUR TOWN WATER SUPPLIES

Richmond Valley Council supplies reticulated water to six towns and villages within our community: Casino, Evans Head, Coraki, Woodburn, Broadwater and Rileys Hill. Council manages the Casino supply and sources water from Rous County Council to supply the Mid Richmond communities. Casino draws its supply from the Richmond River, at the Jabour Weirpool and the Mid Richmond communities receive water sourced from Rocky Creek Dam, at Dunoon, with emergency supplies from the Woodburn bore field in times of drought. Smaller villages and the

Valley's rural districts rely on rainwater tanks for their drinking water supply. The population of our rural regions is not expected to grow significantly over the next 25 years, so they will continue to rely on rainwater as their main water source over the life of this plan, with Council offering access to emergency supplies from the town network in times of drought on a user-pays basis. There may be some opportunities for minor extensions to the water/sewer network for rural blocks adjoining the serviced areas.

## LONG-TERM STRATEGIES

- Plan for long-term growth and essential water infrastructure
- Improve Casino's water security over the short-medium term
- Explore options to connect to a second water supply source for Casino in the longer-term
- Support implementation of Rous' Future Water Strategy to secure the Mid Richmond's water supply

## MEDIUM-TERM ACTIONS

- Monitor and review the Richmond Valley Growth Management Strategy & essential infrastructure plans
- Secure regulatory approvals for RVC's long-term water security program
- Develop and implement options for improved extraction from Jabour Weir
- Investigate options for off-stream storage at Casino and/or raising Jabour Weir. Design & construct preferred option
- Work with Rous to investigate the Lismore-Casino water pipeline proposal as a longer-term option
- Support Rous' expansion of the Woodburn bore field and integration with Council's network.





# Supporting growth and employment in Casino

## Current needs

Casino sources its town water supply from the Richmond River, with water being extracted from the Jabour Weirpool. The water supply supports a population of 11,000, as well as major industries in the town. This includes Casino's largest employer, the Casino Food Co-op.

Under normal conditions, there is sufficient water in the river to meet the town's needs. Casino uses around 6 ML (6 million litres) per day for the town, with around 40% of this being used by the Co-op's meat processing and tannery operations. Under normal conditions, up to 1000 ML of water flows down the river every day. But in periods of extended drought, the flow decreases to the point where there may not be enough water to spill over the weir and keep the river flowing downstream. Council then imposes water restrictions to preserve the supply. If there is a really severe drought, these restrictions can increase to the point where local industry is interrupted. So far, Casino has been fortunate not to experience extreme water restrictions, but, with a less-predictable climate and a rapidly growing town, this could change in the future.

## Future needs

Council has set an ambitious growth target for Casino, with the Regional Jobs Precinct creating up to 1900 new job opportunities over the next 20 years. This will attract more people to the town. Combined with Casino's advantage of having large areas of flood-safe residential land, Council expects that the population could grow by another 4000 by 2040. The studies carried out for the RJP Masterplan and the Casino Place Plan have helped us to understand how and where this growth will occur. Council also engaged consultants to estimate how much water would be required for this growth and whether there would be enough in the Weirpool under drought conditions to supply our growing town. The consultants used historic data and a number of climate change scenarios to complete their study. They calculated the maximum amount of water that the town might need now (unrestricted demand), and the maximum amount in 2050 and concluded that, under drought conditions, Casino could experience water security problems in the future. They also suggested some ways to help reduce this risk. At the moment, Casino generally uses less than the maximum amount, so we are already benefiting from some water savings. If we keep focusing on improving this performance, our planned infrastructure investments will take us well beyond 2050.

## How much water do we need?

(Unrestricted demand)

Now: 2770 ML per year

2050: 3250 ML per year





### Objective #1

# Casino's water security options

## Short-medium term solutions

The Jabour Weirpool has a total capacity of 1,719 ML, but some parts of the pool are deeper than others and Council currently doesn't access the deeper water. Our water security consultants have suggested we could get up to 500 ML more water out of the pool by using a system of floating pumps on pontoons. This would improve security during drought periods and provide a cost-effective solution in the short term.

The study also considered the option of sourcing water from Toonumbar Dam, as suggested in the Regional Water Strategy. However, further investigation revealed a number of constraints with this option, including the dam's small catchment, impacts on irrigators and the requirement for complex negotiations with multiple regulators. While the Toonumbar option remains on the table, the weirpool deep extraction project is the preferred short-medium term solution.

## Long-term solutions

Over the long term, Council could look at raising the Jabour Weir to increase the size of the Weirpool. However, this could be expensive, and the regulators who manage the river may not allow us to do it.

The other option is to find another water source to supplement the Richmond River supply. Previous studies have indicated that there isn't sufficient groundwater to provide a reliable second supply. However further analysis of this option could be undertaken. Connecting to the Rous network at Lismore is an easier solution, but it would be expensive to build the pipeline and Council would have to negotiate with Rous regarding any possible contributions for connecting to the system. This option would also rely on Rous being able to source sufficient water from various supply options in its network to meet Casino's future needs. This might include surface water (dams) groundwater or desalination.

## Risks

Council operates under a Water Sharing Plan, which determines how much water we can take from the river and under what circumstances. At the moment, we have no environmental flow requirements as part of our approval to operate Jabour Weir because the water usually flows over the top. However, under the operating rules, the Minister for Water has discretion to direct Council to put a pipe in the weir to let more of the Weirpool water flow downstream. This would significantly reduce the amount of water available for the town. Although this scenario is unlikely, it is still a possibility that we have to consider and plan for.





## NEXT STEPS

2024-29



### Investigate

Off-stream storage & future  
Jabour Weir raising options  
Casino-Lismore pipeline  
option



### Design

Jabour weir pool deep  
extraction system



### Construct

Jabour weir pool deep  
extraction (2025)



### Objective #1

# Securing the Mid Richmond supply

## Current needs

The Mid Richmond communities of Coraki, Broadwater, Woodburn, Rileys Hill and Evans Head source their water from the Rous network. Water is mainly supplied from Rocky Creek dam, at Dunoon. The water supply supports a population of 5,400, as well as peak season tourist populations and key industries, such as the Broadwater sugar mill.

Under normal conditions, there is sufficient water to supply the Mid Richmond, with annual consumption up to 650 ML. In drought periods, the communities of Woodburn, Broadwater and Evans Head have relied on groundwater resources near Woodburn to supplement supply. However, this supply has experienced challenges with water quality in the past, and two of the bores were impacted by the Pacific Motorway construction, leaving only one for emergency use. Rous is planning to expand and improve this groundwater source so it can be called into service in dry years, taking pressure off the Rocky Creek supply.

## Future needs

Rous has been working on a long-term plan for regional water security for many years, with the latest version of the strategy, Future Water 2060, adopted in 2021. The strategy considers how the County Council will supply bulk water to its four constituent councils – Richmond Valley, Lismore, Ballina and Byron Bay - over the next 40 years, by developing a regional water network, drawing from multiple sources. This includes further developing groundwater supplies at Woodburn, Alstonville and Tyagarah over the next five years.

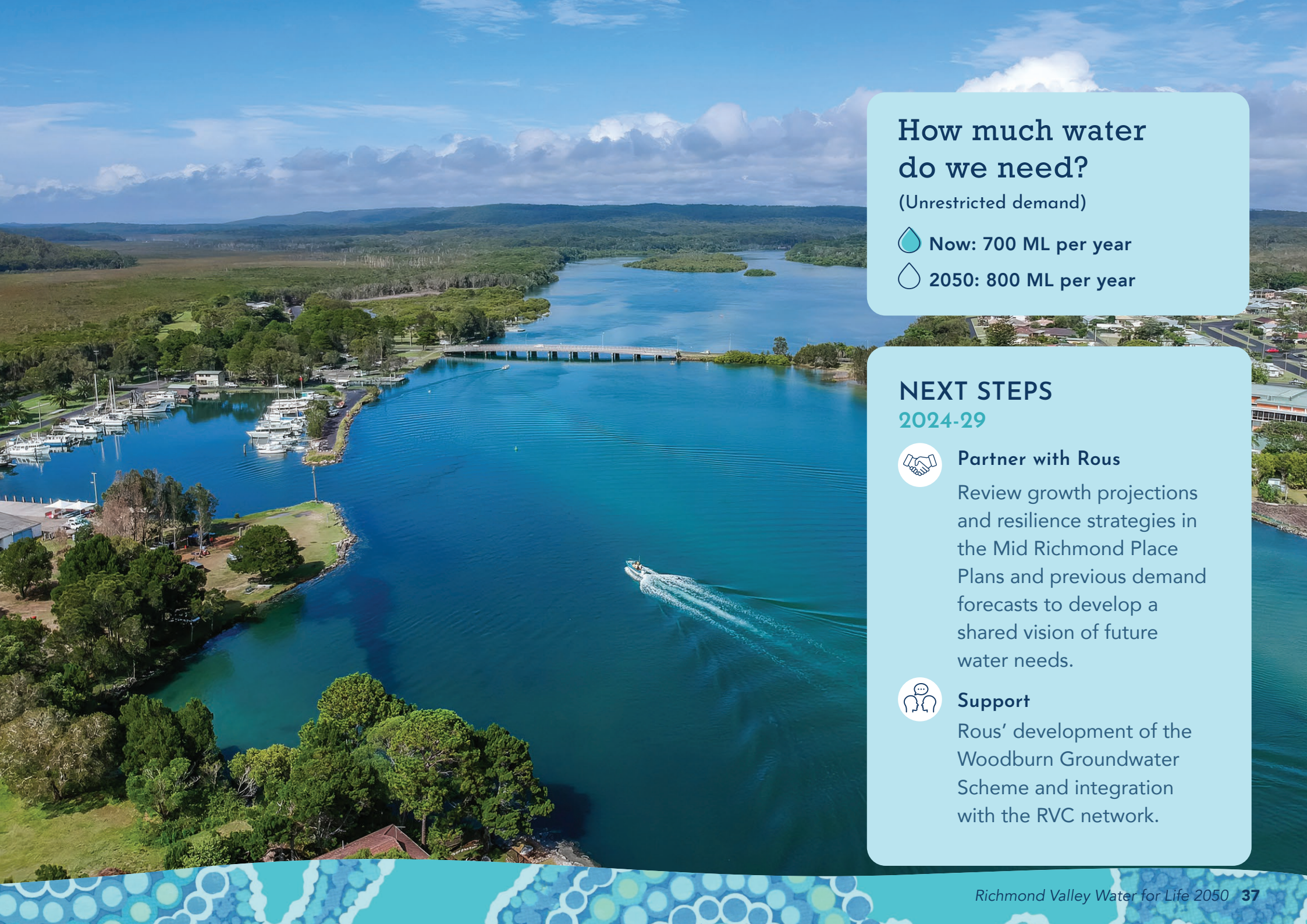
The Woodburn Groundwater Scheme is currently under development, with support from the Safe and Secure Water Program. The first stage will include establishing new water bores for emergency supply, with stage two including construction of a new water treatment plant. The treatment plant will be used in two ways. In normal seasons, it will provide additional treatment for the water supplied from Rocky Creek Dam before it is distributed to the three

Mid-Richmond villages. In dry periods, the WTP will switch to treating the bore water to ensure it meets the required quality standards. This will provide additional water security for the Mid Richmond communities, with the groundwater source capable of providing up to 5 ML per day.

## Next steps


With two water source options, Rous can confidently provide for the Mid Richmond's future water needs and maintain flexibility in its regional network. Once RVC has completed its Mid Richmond Place plans, we will work with Rous to revisit its population growth and future water demand projections for the Mid Richmond. Our latest studies show that patterns of growth in the Mid Richmond will be different, following the 2022 flood, with the NSW government taking a more cautious approach to greenfield development in these communities. This new information will help to inform Rous' long-term planning and both councils will continue to work together to ensure our future management of the water supply is fully integrated.






## How much water do we need?

(Unrestricted demand)

 Now: 700 ML per year

 2050: 800 ML per year

## NEXT STEPS

2024-29



### Partner with Rous

Review growth projections and resilience strategies in the Mid Richmond Place Plans and previous demand forecasts to develop a shared vision of future water needs.



### Support

Rous' development of the Woodburn Groundwater Scheme and integration with the RVC network.



### Objective #2

# IMPROVE OUR WATER SUPPLY NETWORKS

## Safe and efficient systems

Sourcing more water from our rivers, dams and groundwater sources is just the start of addressing water security in our towns and villages. Once the water leaves the treatment plant, Council needs to ensure there is sufficient storage, flow and pressure in our water networks to meet the community's needs. Council's water network has grown over time, with more storage being added and pipelines extended to cater for new development. This means there are some historical issues that we need to address to make sure the system functions at its optimal level.

One of the key focus areas over the next 25 years will be ensuring that there is sufficient water pressure throughout the system, not just for everyday use but also in emergencies, such as house fires. Council will undertake a network performance review and identify priority projects to improve water pressure in the Casino network, as well as working with Rous on the Mid Richmond network as development density increases in Evans Head. Rous is currently replacing its water supply main to the

area, which will result in improved reliability for the Mid Richmond service and further options to improve water pressure in Broadwater are currently under investigation.

Keeping our system safe is also important. Normally, water supply networks flow in one direction - from the treatment plant to the tap. But if the system loses pressure, such as a mains break, it can start to act like a syphon and draw potentially contaminated water from homes and industries back into the pipes. To prevent this, each water meter is fitted with a backflow prevention device. Over the life of this plan Council will continue to work with our larger industrial and commercial users to ensure they have adequate backflow prevention installed.



## LONG-TERM STRATEGIES

- Ensure adequate water storage, capacity and pressure within council's supply network
- Plan for system upgrades maintenance and augmentation
- Improve system performance and resilience

## MEDIUM-TERM ACTIONS

- Undertake network performance review, including capacity for emergency response
- Implement water pressure improvement program
- Implement backflow prevention program
- Develop and implement water network performance standards and design improvements, including leak reduction strategies
- Design & construct system augmentation for Casino greenfield housing sites and RJP
- Replace Casino North Reservoir No.1 and Coraki low level reservoir.



## Performance and resilience

The natural disasters of the past five years have taught us that we need to make our infrastructure more resilient to fire and flood. This includes improvements such as raising the electrical switchboards in our pump stations and providing back-up power supplies and improved telemetry for key water infrastructure. We will continue to implement new design improvements over the coming years. Council will also consider opportunities to improve the performance of the network. We will use the NSW Government's performance measures for Local Water Utilities as a starting point for this program.



*Council's water team carrying out urgent repairs after the 2022 floods.*

## Planning for growth and renewal

Over the next 25 years, the water supply network will expand to cater for new residential and industrial growth. The largest extension planned is to activate the South Fairy Hill residential sites, which can ultimately provide up to 4000 homes. Stage one will include two new reservoirs and pump stations and 5 km of water main to connect the new estate to the town supply.

It's also important that we ensure our existing water network remains in good condition. Our Asset Management Plans are reviewed every four years and help us to plan inspection, maintenance and renewal programs for water assets. Key renewal projects in the network over the next 10 years include replacement of Casino North No.1 reservoir and replacement of the low-level reservoir at Coraki.

## NEXT STEPS

2024-29



### Investigate

Network performance and water pressure improvements



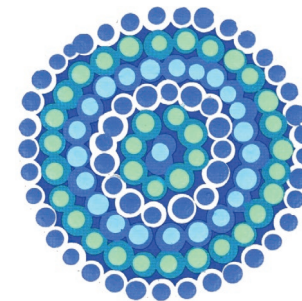
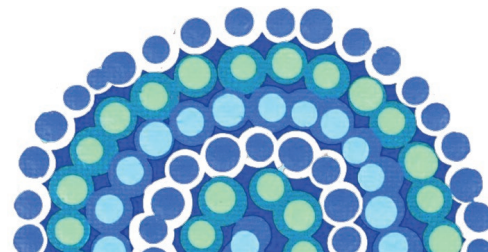
### Design

Infrastructure extensions to service South Fairy Hill residential release and RJP Reservoir replacements, Casino & Coraki



### Build

RJP and South Fairy Hill enabling infrastructure





### Objective #3

# PROMOTE RESPONSIBLE WATER USAGE

## Water saving programs

One of the easiest ways to ensure we have enough water for the future is to encourage households and businesses to use less. This will become even more important as our community grows. Our water security studies have shown that everyday water saving measures, such as rainwater tanks and water efficient appliances will not be sufficient in times of extended drought to avoid increasing water restrictions. Both RVC and Rous will need to invest in new infrastructure to ensure long-term water security.

Richmond Valley households currently perform better than others in our region in their average water usage. Many local people grew up on farms and have learned good water-saving habits. With the introduction of the Basix building requirements in 2004, all our newer homes are now designed for water saving. But there is still more that we can do to reduce consumption. Council currently works with Rous to deliver a regional Demand Management Strategy, which includes education on water

saving. We are also developing our own Demand Management Program for the Casino supply, with a key focus on major water users. Our highest users currently include food manufacturers (meat & dairy) caravan parks and Council's own operations. As a first step in our program, we are reviewing all of Council's activities to identify more ways to save water. We will also be monitoring consumption patterns for other high-use customers and providing data and support to help them improve their water efficiency.

One of the main initiatives we'll be introducing in the future is Smart Water Metering for homes and businesses. This will help customers to better monitor and manage their own water usage, as well as providing live data to Council on what is happening within its water network. The Smart Metering program will be rolled out over the next 10 years, with the Mid Richmond communities receiving their new meters first, followed by Casino.

## LONG-TERM STRATEGIES

- Develop and implement demand management programs
- Support high water use industrial/commercial activities to reduce consumption
- Implement Smart Metering across the water network
- Develop drought management strategies for community water supplies.

## MEDIUM-TERM ACTIONS

- Partner with Rous to deliver the regional demand management strategy
- Lead by example in reducing Council's water usage
- Monitor high water-use commercial/industrial activities and support reduced consumption
- Implement Smart Metering program for RVC water customers – Stage 1 (Mid Richmond) & 2 (Casino)
- Reduce water loss from supply networks.
- Develop and implement a new Drought Management Strategy for Council's water supply

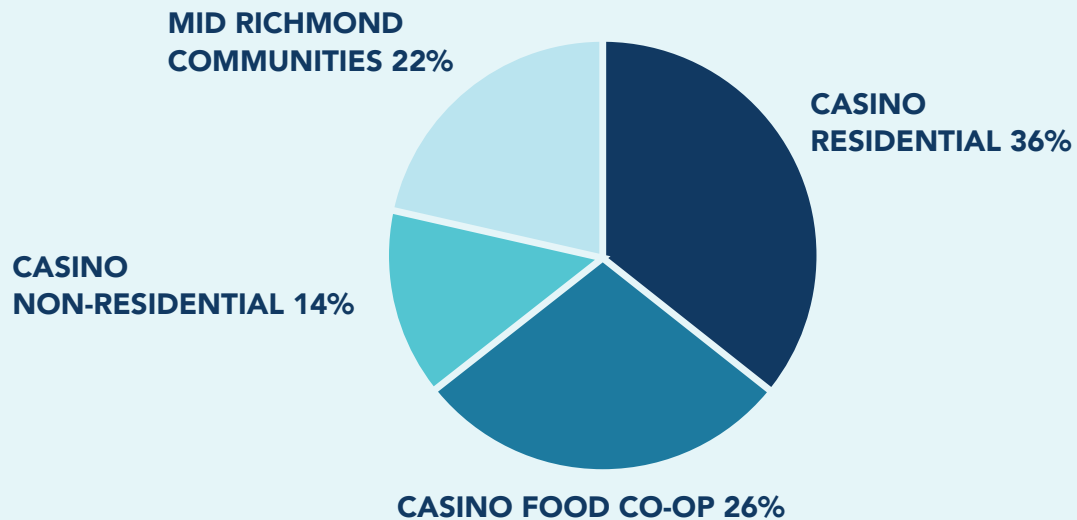


## A new Drought Management Plan

In extended dry periods, saving water and carefully managing our supply becomes essential. Rous and Richmond Valley Council both have Drought Management Plans which include the triggers for water restrictions. Generally we try to apply the same level of restrictions across our Mid Richmond communities (supplied by Rous) and our Casino community (supplied by Council) to ensure consistency.

Richmond Valley Council's Drought Management Plan was prepared some time ago and we need to update it to factor in the potential impacts of climate change and the potential benefits of our water security improvement works. We also want to align our plan with Rous' plan to ensure that our water restriction requirements are the same. Council expects that climate change will increase the length and severity of droughts in the future, so it is important that we invest in new water security infrastructure and water saving measures to ensure that our community can continue to grow, without facing more frequent and severe water restrictions.

### AVERAGE TOTAL WATER USAGE -2730 ML



### NEXT STEPS

2024-29



#### Investigate

Options to reduce water consumption for high-use industries & Council operations



#### Implement

Community water saving programs.



#### Review

Richmond Valley Drought Management Plan



#### Roll-out

Smart metering for Mid Richmond customers



## Objective #4

# UPGRADE OUR WATER TREATMENT SYSTEMS

The Richmond Valley receives its drinking water from two major treatment plants: Rous' Nightcap WTP and Council's Casino WTP.

### Mid Richmond supply

The Nightcap plant serves the Mid Richmond communities via the Rous network. The plant was built in 1994 and has had a series of upgrades since that time. It now has more modern, automated treatment systems, with capacity for further improvements and a future increase in capacity from 70 ML/day to 100 ML/day, if required. Rous will also be constructing a new 5 MLd water treatment plant as part of the Woodburn borefield expansion.

### Casino supply

The Casino WTP was built in 1985. Despite some process upgrades in 2010 and 2020, the plant still relies heavily on manual operation and its level of water treatment is not as sophisticated as modern plants. The water quality of the Richmond River source also presents various treatment challenges, particularly from periodic increases in blue-green algae, organics and manganese.

There is also the risk of chlorine-resistant micro-organisms such as cryptosporidium, in our unprotected catchment. These challenges increase during periods of drought, bushfire, heavy rainfall and flood. As climate change continues and our river water quality deteriorates, Council will need to add more water treatment barriers and automated systems to ensure Casino's town water is always safe to drink.

Our current water treatment plant has ample capacity for the future, being designed to process 23 ML per day. Casino currently uses about 6 ML per day and even with our expected growth over the next 25 years there will still be plenty of capacity in the plant. Our key focus is on upgrading the treatment processes and the supporting electrical and telemetry systems at the plant.

Council's water treatment processes also include fluoridation of the water, to help improve dental health in our community. The fluoride is added in accordance with NSW regulations and health approvals. Rous also adds fluoride to the Mid Richmond's water supply.

## LONG-TERM STRATEGIES

- Upgrade Casino Water Treatment Plant to improve treatment processes
- Improve pre-filtration and post-treatment systems in the water network
- Support Rous' treatment improvement programs in the Mid Richmond

## MEDIUM-TERM ACTIONS

- Design & construct Casino WTP upgrade
- Complete Raw Water pumpstation PAC dosing upgrade
- Monitor and upgrade post-treatment chlorine dosing systems
- Support Rous' upgrade of the Woodburn bore field WTP and integration with the RVC network.





## Upgrading Casino's water treatment plant

Over the past four years, Council has been working closely with NSW Health's water unit and the Department of Climate Change, Energy, the Environment & Water (DCCEEW) to examine the performance of the Casino WTP and plan improvements. This has included multiple technical studies and specialist water testing. We are now at the point where we can formulate our final plans for the WTP upgrade, and we aim to complete the project within the next five years.

Council expects the upgrade will cost at least \$10m and has secured part funding from the NSW Government's Safe and Secure Water Program to help complete these works. We will continue to pursue additional funding from Federal Government grants programs in the coming years.

## NEXT STEPS 2024-29



### Investigate

Finalise studies and options for Casino WTP upgrade.



### Design

Complete final plans for improvements to Casino WTP treatment processes, electrical systems & telemetry.



### Build

Complete construction work for the Casino WTP upgrade.



### Objective #5

# ENSURE OUR WATER IS ALWAYS SAFE TO DRINK

## Quality control

Richmond Valley Council was the proud winner of the 2021 Best Tasting Tap Water in Australia competition and we continue to provide high quality treated water to our community. Once our water leaves the treatment plant, we have to ensure it remains safe to drink as it travels through the entire water network of pumps, reservoirs and pipes. It is important to ensure that chlorine levels remain adequate to disinfect the water and that no new contaminants can enter the system.

To ensure our water is safe, Richmond Valley Council and Rous rely on Drinking Water Quality Management Systems. These systems are required under the Public Health Act 2010. Public water supply is now managed in a similar way to food production, with quality management systems and critical control points throughout the supply process. Council's water team monitors the critical control points to make sure the system is working and quickly correct any issues. Our quality systems are based on the Australian Drinking Water Quality

Guidelines, which now include new Health Based Targets (HBTs) for local water utilities. HBTs aim to reduce the risk of micro-organisms such as cryptosporidium, entering the water supply. This risk is higher in unprotected catchments and will need to add more treatment barriers in future to help achieve the targets. The Casino WTP upgrade will include these extra barriers.

Maintaining quality control in the Casino water supply is most difficult after periods of heavy rain when there is a lot of turbidity (dirt and organic matter) in the river. Quality is also affected during periods of high temperature and low flow, with increased risk of algal blooms. When the river is in flood, it becomes very difficult to continue pumping for our water supply. This is why it's important that we add more storage capacity in the future or secure a second clean back-up water supply.

## LONG-TERM STRATEGIES

- Ensure compliance with the *Public Health Act 2010*.
- Ensure compliance with the Australian Drinking Water Quality Guidelines
- Implement improvements to achieve Health Based Targets

## MEDIUM-TERM ACTIONS

- Implement, audit & review RVC's Drinking Water Quality Management System
- Develop and implement network inspection and water testing regimes
- Incorporate additional treatment barriers in Casino WTP upgrade
- Manage fluoride dosing systems effectively
- Work with Rous to ensure consistent water quality and testing regimes for the Mid Richmond.



## Testing and inspection regimes

Council undertakes regular water quality testing throughout the network to ensure our water meets the Australian Drinking Water Quality Guidelines. We also undertake regular inspections to ensure our reservoirs, pumps and pipes are well maintained and that no contaminants can enter the system. Our reservoirs are regularly cleaned by specialist contractors and we have a program to replace older reservoirs with more modern facilities that are easier to keep clean. If we detect a water quality problem, Council works with NSW Health to ensure it is corrected quickly. On rare occasions we may need to issue a boil

water alert to our customers to provide extra protection. This happened during the 2022 flood. In the Mid Richmond, Council works in partnership with Rous to ensure that our quality control systems align. We undertake regular testing of the water as it passes through the Mid Richmond supply network.

We also test our quality control systems on a regular basis, to make sure they are fully compliant. Council receives funding from NSW Health to engage consultants to review the system. The results of the review are then discussed at a workshop with our regulators and Council implements any recommended improvements.



Water Treatment Plant Operations Team Leader, Allison Hawthorne shows how the treatment process improves our drinking water quality.

## NEXT STEPS

2024-29



### Partner

Work with NSW Health to continually improve our water quality management systems



### Inspect

Our water networks regularly and monitor the critical control points in our system



### Build

Complete the Casino WTP upgrade



### Objective #6

# PROTECT OUR WATER CATCHMENT

The Richmond River catchment extends for 7026 km<sup>2</sup>, well beyond the boundaries of our local government area, and many agencies, organisations and individuals play a role in catchment protection. The catchment has three main arms: the Richmond River, the Wilsons River and Bungawalbin Creek.

The NSW Government's Far North Coast Regional Water Strategy considers the future management of catchments in the Northern Rivers and identifies the need for better governance of the Richmond River catchment to improve water quality. Some of the key catchment impacts identified include historic logging operations, agricultural practices, on-site septic management and sewage overflows.

Council has a role to play in catchment management, to protect future water security and quality for our communities. This role includes:

- Advocating to government for riverbank and habitat restoration programs
- Working with other stakeholders, such as Local Land Services, NSW Fisheries, Landcare and local Aboriginal groups
- Providing community education on the importance of protecting our local waterways
- Undertaking our regulatory responsibilities in approving and inspecting on-site sewage management systems, such as septic tanks, and monitoring underground petroleum storage tanks
- Improving the performance of our stormwater systems and sewerage infrastructure

Our Sustainable Communities Strategy outlines key actions and performance measures for our catchment protection programs.

## LONG-TERM STRATEGIES

- Implement RVC's Sustainable Communities Strategy catchment actions
- Partner with NSW Government and other stakeholders to improve catchment governance & protection

## MEDIUM-TERM ACTIONS

- Advocate for river restoration programs & seek funding to design & deliver riparian habitat restoration programs.
- Partner with other stakeholders on catchment protection programs.
- Manage high risk on-site sewage and liquid trade waste systems.
- Ensure compliance of underground petroleum storage systems.
- Partner with State Government agencies to support Richmond River water quality monitoring
- Improve stormwater management and sewerage infrastructure



## Managing septic tanks and sewage treatment systems

Properties outside the Richmond Valley's urban areas generally rely on on-site sewage management systems, such as septic tanks and aerated systems, to treat their household sewage. Well-designed and maintained systems can operate efficiently for many years, but when these systems fail, untreated sewage can find its way into groundwater systems and rivers. To manage this risk, NSW regulations

require everyone who has an on-site sewage management system to hold two approvals from their local council: One to construct the system, and one to operate it once it's built. The approval to operate is regularly reviewed to ensure the system is working efficiently and not posing a risk to the environment and human health. Council monitors high-risk on-site systems that are located near waterways, as well as monitoring its own sewage treatment plants to ensure the treated water we discharge to the river meets the required standard.



## NEXT STEPS

2024-29



### Partner

Work with other organisations and landowners to help improve riparian zones and protect our waterways.



### Monitor

Approve and inspect on-site sewerage management systems. Monitor the performance of Council's sewerage network and treatment plants.



### Participate

Support community education programs to raise awareness of catchment protection.



### Objective #7

# UPGRADE OUR SEWAGE TREATMENT SYSTEMS

Richmond Valley Council currently supplies sewerage services to six towns and villages within our community: Casino, Evans Head, Coraki, Woodburn, Broadwater and Rileys Hill. Council operates four sewage treatment plants, with a fifth plant to be constructed in 2025 as part of the Rappville community sewerage scheme. Our current treatment plants have been in service for many years, with Casino STP being the oldest (dating back to 1932). Coraki STP was constructed in the 1960s, Riley's Hill STP in the 1990s and our most recent plant, Evans Head (Stage 1) in 2007. Technologies have improved substantially over the years and our newer plants are able to perform to a much higher standard than the older plants, providing more effective odour control and a better quality of treated water to return to the environment.

Council has a long-term plan to progressively upgrade and replace its sewage treatment plants, with the Casino STP being the highest priority. This plant is reaching the end of its asset life after 90 years of service and we plan to invest up to \$65m to replace and expand the facility to cater for Casino's growing population.

Evans Head STP is also nearing its Stage 1 capacity and Council will be partnering with the NSW Government, through the Safe and Secure Water Program, to deliver Stage 2 of the facility in 2025. A future upgrade is also planned for the aging Coraki plant and construction of the Rappville STP will commence in 2025.

Council has no plans to provide reticulated sewerage systems to other rural settlements in the Valley in the foreseeable future, as the population of these areas is not expected to grow significantly over the next 25 years. Rural areas will continue to rely on septic tanks and other on-site systems, although there may be some opportunities for minor extensions to the sewer network for rural blocks adjoining the existing serviced areas.

## LONG-TERM STRATEGIES

- Plan for long-term growth and essential sewage infrastructure
- Complete major STP redevelopment and augmentation projects
- Monitor and upgrade minor sewage treatment plants

## MEDIUM-TERM ACTIONS

- Monitor and review the RV Growth Management Strategy & essential infrastructure plans
- Secure regulatory approvals for Council's capital works program
- Design, construct & commission Casino STP replacement
- Complete construction of Stage 2 Evans Head STP
- Construct Rappville community sewerage scheme
- Design & deliver Coraki STP process improvements
- Improve automation of Rileys Hill STP.







### Objective #7

# *A new treatment plant for Casino's growing community*

## Current needs

Over the next 25 years, Casino's population is expected to grow significantly, with an additional 4000 people by 2040, and a further 2000 by 2050, taking our total population to around 18,000.

Achieving this growth will rely on Council's capacity to provide the essential infrastructure our community needs, with replacement of the Casino STP being our top priority over the next five years.

## Out with the old . . .

The current Casino STP was built in the 1930s, with subsequent upgrades in the 1960s and '90s. The plant has now reached the end of its asset life, deteriorating to the point where it would be more expensive to upgrade the old facility than to build a new one. With major advances in technology over the last 90 years, we have the opportunity to develop a high-performing treatment plant that will improve environmental outcomes and serve Casino well into the future. Council owns the land adjoining the existing STP and plans to build the new facility there. Undertaking a greenfield

development will allow us to keep the old plant in service while we design and construct the new one. It will also allow the time we need to thoroughly test and commission the new facility before taking the old one out of service. Council expects the whole construction and decommissioning process will take at least five years by the time we obtain the necessary approvals, complete the designs and engage contractors to carry out the works.

## In with the new . . .

The new Casino STP will cater for a future population of 20,000, with capacity for further augmentation beyond 2050. The new design replaces the old trickling filter sewage treatment process (which is 50 years out of date) with a modern IDEA treatment system (similar to the Evans Head STP). These systems are robust and easy to operate, with improved automation and monitoring systems. The new plant will produce higher quality treated effluent, which can be either returned to the environment, or re-used for irrigation or industrial purposes.

With an expected cost of \$65m, this represents the largest construction project Council has ever undertaken, so we need to proceed carefully

and draw on expert advice to ensure we manage project risks and deliver a high-quality facility. Council has engaged specialist advisors and project management consultants to support our in-house project management team through the design and construction process. So far, we have completed the scoping and options assessment phase and plan to progress to the design and approval stage in 2025. Construction is due to start by early 2026, subject to funding, with commissioning by 2028. The project will provide opportunities for local businesses and contractors to be involved in the construction phase.

## Investing in the future

The new treatment plant will be funded from a number of sources, including Council, loan borrowings and government grants. We are currently pursuing funding from the NSW and Federal Governments to support the design phase, prepare a business case and bring the project to shovel-ready stage. Council is also advocating strongly for the additional money it needs to complete the construction phase to ensure we can deliver this once-in-a-generation project for Casino.





Capacity for a population of  
**20,000**

**\$65M** investment

**100 YEARS** asset service life

Designed for staged  
augmentation

## NEXT STEPS

2024-29



### Investigate

Complete scoping, options and project pre-approval works.



### Secure

Funding and approvals for detailed design and construction



### Design

Complete concept and detailed designs for replacement STP.



### Build

Construct replacement STP on new site and prepare for decommissioning of the old site.



### Objective #7

# Delivering Stage 2 of Evans Head STP

Evans Head STP was constructed in 2007 to replace the town's original plant, which had reached the end of its asset life and was not performing to the required standard. The current facility serves the town of Evans Head, as well as the villages of Woodburn and Broadwater and was designed to be constructed in two stages. Stage 1, which caters for a population of up to 5,500, is now reaching capacity, with steady residential growth in Evans Head and increasing visitor numbers in the peak holiday seasons.

Stage 2, currently under development, will double the capacity of the plant, catering for a total population of 11,000. This stage will add additional IDEA treatment systems and also include some maintenance and improvement works on the Stage 1 structures. The resident population of the three communities is not expected to reach the design capacity of the plant within the life of this strategy. However, Council also needs to ensure that the STP can cater for peak holiday times, which bring thousands of extra visitors to the town.

Building additional capacity into the STP will help to improve its environmental performance by providing more flexibility to manage the treatment process, particularly in storm events when inflow can increase rapidly. We will continue to monitor the receiving waters in the wetlands and Salty Lagoon once Stage 2 is commissioned.

Council is partnering with the NSW Government to deliver this project, with part funding from the Safe and Secure Water Program. The remaining funds will come from Council's reserves.

**Capacity for a population of 11,000**

**\$12M investment (stage 2)**

**100 YEARS asset service life**

### NEXT STEPS

2024-29



#### Investigate

Complete the pre-construction and approvals process



#### Design

Finalise the concept and detailed design work



#### Build

Stage 2 of the treatment plant in 2025



# Delivering solutions for our villages

Council operates two smaller treatment plants at Coraki and Riley's Hill and will shortly begin construction on a third treatment plant for the new Rappville sewerage scheme. Both the Riley's Hill and Coraki plants were impacted by the 2022 floods and Council has been progressing with repair and resilience works at these plants over the past two years. Further works to automate the Riley's Hill plant are scheduled.

## Upgrading Coraki STP

Coraki STP was constructed in the 1960s and relies on the old trickling filter treatment process. The plant has reached the stage where it needs an upgrade to improve performance and Council has completed preliminary investigation work into future upgrade options. We are also currently completing the Coraki Place Plan, which will provide guidance on where future residential development will be located and the expected growth rate of the village. Once the plan is completed, Council will reassess the capacity of the plant and develop more detailed options for improvement. The main process improvement works are scheduled in Stage 3 of our Water Strategy

## A new sewerage scheme for Rappville

The village of Rappville was severely impacted in the October 2019 bushfires. Of the 42 homes in the village, nine were destroyed and six were damaged, with the community hall also being destroyed. Rappville was further impacted by the 2022 flood and our new flood studies have shown that the village is more constrained for future growth than originally envisaged. Over the past four years, Council has been working with the Rappville community to help rebuild the village, including construction of a new \$1.5m community hall. We have now received some \$7m from the Bushfire Economic Recovery Fund to construct a small community sewerage scheme at Rappville. The new scheme will be a pressure sewerage system, with an oxidation pond treatment process. Treated water from the STP will be used to irrigate adjoining land. Council is currently finalising the design for the scheme and plans to begin construction in 2025.

## NEXT STEPS

2024-29



### Investigate

Improved automation of Riley's Hill STP  
Process improvements for Coraki STP



### Design

Finalise design for Rappville sewerage scheme



### Build

Rappville sewerage scheme





### Objective #8

# IMPROVE OUR SEWERAGE NETWORKS

Upgrading our sewage treatment plants is just the first step in effectively managing Council's sewerage network. We must also ensure that the pumps and pipelines transferring the sewage to the STP are working efficiently and that we undertake regular maintenance and renewal of these assets. A key focus for the future will be on continuing to improve our asset management and addressing the three main risks to our sewerage network and the environment: Stormwater inflow and infiltration; liquid trade waste and sewer blockages.

### Detecting inflow and infiltration

Community sewerage systems are not designed to carry stormwater. If water floods into the network after heavy rain, our treatment plants find it hard to cope with the extra loading and there is an increased risk of sewage overflows. Stormwater can enter the system through illegal connection of downpipes and other stormwater systems to the sewer, and infiltration through damaged pipes or manhole covers. Council has developed an Inflow and Infiltration Strategy for the Casino network to help prevent stormwater ingress. This includes smoke testing to detect

illegal connections, monitoring our pump stations to identify when they are under stress from increased flows and inspecting our sewer pipes using CCTV. We also plan to prepare Inflow and Infiltration strategies for the Coraki and Evans Head sewerage networks and will continue our monitoring and prevention programs throughout the life of this strategy.

### Managing trade waste

Although our sewerage networks are designed for household wastes they must also cater for local industries and commercial activities. Some businesses produce liquid wastes - such as cooking oils, animal fats and dairy products, motor oils and chemicals - that could damage the sewerage network and harm the environment. To manage this risk, these businesses must hold an approval to discharge to the sewer and demonstrate that they have adequate pre-treatment systems in place. As our industrial precincts grow over the next 25 years, effectively managing liquid trade waste will be a high priority for Council, with increased inspection and monitoring programs.

## LONG-TERM STRATEGIES

- Ensure adequate capacity within the system for peak wet weather flows.
- Manage risks and improve system performance and resilience
- Plan for system upgrades, maintenance and augmentation

## MEDIUM-TERM ACTIONS

- Develop and implement inflow and infiltration programs
- Improve the management of liquid trade waste
- Provide community education on protecting the sewerage network
- Improve automation and system monitoring to reduce overflow risks
- Implement pump station upgrade and improvement program
- Implement sewer inspection and relining program
- Maintain network performance standards



## Providing community education

The community has an important role to play in protecting our sewerage networks and the environment by choosing products that are 'sewer friendly'. One of the main causes of sewer blockages and overflows is an accumulation of baby wipes and other products, which - despite the promises on the packet - are not 'flushable'. Council will provide more community education programs in future to help customers manage the risks to their household sewer pipes. We will also be providing more information through our community greening program to help people choose the right tree for the right location, especially near underground pipes and services.

## Embracing new technologies

Sewerage systems have changed a lot over the past 50 years. We now have access to systems that allow live monitoring and remote operation of treatment plants, and there have been significant improvements in asset design and resilience. Over the next 25 years, Council will progressively upgrade our sewage pump stations to operate more efficiently and be more resilient to floods, and increase automation and monitoring of our treatment

plants to provide early detection of any environmental risks. We will also continue to explore opportunities for incorporating back-up power supplies in our sewerage assets, to help us maintain these essential services during natural disasters.

## Expanding our sewerage networks

Council plans two major extensions to the sewerage network over the next five years, including completion of the new Rappville sewerage scheme and extension of the Casino network to accommodate new residential development at South Fairy Hill. The Rappville scheme will provide better environmental outcomes for the village, with decommissioning of existing septic tanks. The Casino network extensions will open the way for up to 1600 new homes in stage one of the proposed development, with potential to add further stages in the future.

## NEXT STEPS

2024-29



### Investigate

Develop Inflow and Infiltration strategies for Coraki and Evans Head networks



### Improve

Increase oversight and regulation of liquid trade waste  
Monitor and improve sewerage network performance with new technologies



### Build

Sewerage network extensions to activate greenfield development sites in Casino



### Objective #9

# PROTECT OUR ENVIRONMENT

## Demonstrating compliance

Managing the environmental performance of our water and sewerage networks and reducing our carbon footprint will be a key focus for Richmond Valley Council over the next 25 years.

Council is required to hold Environmental Protection Licences for its three larger treatment plants - Casino, Evans Head and Coraki. The licence sets quality standards for the treated water discharged from the plant and Council undertakes regular testing to ensure that levels of potential pollutants, such as faecal coliforms, nitrogen, phosphorus, oil and grease and suspended solids, are within the licence limits. The EPA sets licensing fees based on the pollutant loads discharged from the plant. The licensing system has been extended in recent years to include the entire sewerage network connected to the plant, with requirements to reduce the risk of overflows from pump stations and pipes.

At present, the licensing requirements for our older plants, Casino and Coraki, reflect the basic standard of treatment these systems

can provide. However, as Council upgrades and replaces its STPs with more sophisticated systems, higher performance standards will be applied. With the extension of licensing to the entire network, we will also need to focus more closely on managing inflow and infiltration and undertaking system inspection and maintenance programs.



## LONG-TERM STRATEGIES

- Manage environmental risks within our sewerage networks and ensure operating licence compliance
- Reduce environmental impacts of our water/sewer network operations

## MEDIUM-TERM ACTIONS

- Implement testing and monitoring systems to ensure compliance with STP operating licenses
- Improve automation and system monitoring to reduce overflow risks
- Monitor and reduce network energy consumption, including solar installation program
- Explore opportunities for treated effluent reuse schemes



## Reducing our carbon footprint

The NSW Government has committed to cutting greenhouse gas emissions by at least 50% by 2030 and reaching net zero by 2050. Council has also committed to reducing our carbon footprint, as part of our Sustainable Communities Strategy. As a starting point, we've examined our main areas of operation to identify which services are generating the greatest emissions, either directly (such as methane generated from landfills) or indirectly (through electricity consumption). The analysis showed that our sewerage services were the second highest source of emissions, due to methane production and the amount of electricity used to operate the treatment plants and pump stations. Our water services were the fifth highest source of emissions, largely due to electricity consumption.

Council is working on ways to reduce electricity consumption in our water and sewer networks. So far, we have installed a solar system at

### ANNUAL WATER & SEWER OPERATIONS

**5,320 Co2-e (tonnes)** Greenhouse gas emissions

**1,631,448 KWH** Electricity consumption

**\$452,263** Electricity costs

the Casino Water Treatment Plant and are currently designing a solar system for the Casino raw water pump station. We also plan to incorporate solar energy into the design of our new sewage treatment plant at Casino. Actively reducing inflow and infiltration in our sewerage networks will also bring substantial savings in electricity as it will reduce the operation time for our pump stations. Council will continue to monitor its environmental performance over the life of this plan, with the aim of moving towards net zero.



### NEXT STEPS

2024-29



#### Investigate

Further analyse our water and sewer operations and set emissions reduction targets



#### Design

Design our new sewerage treatment plants and assets with more environmental safeguards



#### Build

Incorporate eco-friendly products and practices in our construction projects



### Objective #10

# MANAGE OUR RESOURCES RESPONSIBLY

## Supporting our workforce

To successfully deliver water and sewerage services to our community, Council relies on three essential resources: People; funding, and assets. Our people - including technical and operational staff and contractors – are our greatest asset, but the Australian labour market is currently experiencing a major skills shortage in this field and it is increasingly difficult to find experienced treatment plant operators, instrumentation electricians and operational staff with specialist water/sewer skills. Council has traditionally taken a “grow our own” approach to developing a skilled workforce and we invest heavily each year in youth traineeships. However, we will need to do more to attract and retain specialist staff in the future.

Another key aspect of managing our workforce is ensuring that everyone is safe at work. Water/sewer operations are some of the most dangerous activities that we undertake in Council, as they involve a wide range of hazards. It is important that we invest in robust safety systems for these activities and provide adequate training and safety equipment for our workforce. This will be a major focus over the life of this plan.

## Managing our assets

With more than \$280m in water and sewerage assets, there's a lot to maintain and, ultimately, replace in our networks. Council's Asset Management Strategy takes a whole-of-asset-life perspective in designing, funding and managing our water and sewerage assets. We also prepare 10-year asset management plans for water and sewer to set appropriate levels maintenance and renewals. Council calculates the depreciation on our assets using formulas mandated by the NSW Government. These calculations tell us how much money we need to be setting aside to ultimately replace these facilities when they reach the end of their asset life. This helps us to calculate the true cost of providing water and sewerage services. Because water and sewer treatment plants can take up to 10 years to design and construct, we need to be constantly planning for future upgrades and renewals in our system. Council will continue to develop and integrate its strategic asset planning and management systems over the life of this plan.

## LONG-TERM STRATEGIES

- Plan for inter-generational investment
- Ensure a safe workplace
- Develop and maintain a skilled workforce
- Develop and maintain asset management systems

## MEDIUM-TERM ACTIONS

- Actively pursue government funding opportunities for water/sewer projects
- Undertake long-term financial planning for capital works
- Review and update water and sewer asset management plans.
- Integrate water and sewer operations with RVC asset management systems
- Implement RVC workplace safety framework
- Involve water/sewer operations staff in design review and safety improvements
- Invest in training and staff development programs



## Long-term financial planning

Council undertakes long-term financial planning as part of our IP&R requirements. This is particularly important for water and sewerage services, that require inter-generational investment. Although councils have traditionally relied on state and federal governments to help fund their major capital works, this funding is wholly discretionary and grants programs have varied over the years. Councils now have to plan long-term for their capital investments, with the expectation that there may be no government assistance available. In a time of rapidly escalating construction costs, this is increasingly difficult.

There are challenges in raising the necessary funding for the replacement/upgrade of larger assets. Councils have a number of sources to rely on apart from government grants, including developer charges, water and sewer charges

and loans. Developer charges for water/ sewer (known as Section 64 contributions) are an upfront charge, to recover part of the infrastructure costs from servicing new developments. Council prepares development servicing plans to determine the contributions required. However, because water and sewer is enabling infrastructure, we must invest in these assets first and then slowly recover some of the costs from developers.

Councils also have the option to raise loans, but we are limited in the amount that can be borrowed, and the terms of the loan. Although we are planning for assets that last 100 years we can only secure loans for up to 20 years, so the current generation carries a greater share of the asset cost. Council will continue to advocate to the NSW Government for better funding models for water and sewer investment in the coming years.

## NEXT STEPS 2024-29



### Investigate

Identify options to further develop our water/sewer workforce.  
Develop a long-term funding strategy for our water/sewer operations.



### Design

Continue to develop and integrate our strategic asset management systems



### Advocate

Actively pursue Government funding for our Signature Projects

**\$18.02M** Total income from water/sewer operations 2023-24

**\$16.12M** Total water/sewer operations expenses 2023-24

**\$100M+** Required capital investment in water/sewer infrastructure 2024-2029



### Objective #11

# DELIVER VALUE FOR MONEY SERVICES

Customers expect value for money and reliability from our water and sewerage services, so it is important that we design and build our assets to withstand the region's challenging climate and undertake regular inspections and maintenance of the system to avoid service interruptions. Over the life of this plan, we will work with our residential and commercial customers to develop agreed standards for service reliability and undertake regular service reviews, as required by IP&R.

### Setting water and sewer prices

To achieve the agreed service levels and fund our future infrastructure, Council must set long-term price paths for our water and sewerage services that reflect the true operating and capital costs of the system. We currently charge a two-part water fee for residential and commercial customers, consisting of an access charge and a water usage charge.

The access charge reflects the cost of providing water network infrastructure, such as treatment plants, reservoirs, and pumps, and ultimately

replacing them at the end of their life. This charge is determined by the size of your water meter, with those who have larger sized meters (generally commercial/industrial activities) paying a higher rate and residential customers paying the lowest amount. The charges collected cover only a small proportion of our capital works requirements.

The usage charge reflects the actual cost of delivering water to your door – pumping it from the river, treating it and transferring it. The usage charge is levied on a per kilolitre basis, depending on how much water a customer consumes. Currently everyone in the Richmond Valley - with the exception of our largest water user, the Casino Food Co-op - pays the same basic usage charge for their water, regardless of where the water is sourced from, or whether they are a residential or commercial customer. Residential customers pay a higher rate if they use more than 200 kl in a billing quarter. This encourages water saving in households.

The majority of customers pay a set sewerage charge, which covers the cost of maintaining

## LONG-TERM STRATEGIES

- Establish service standards and undertake regular service review
- Develop and implement pricing structures that reflect the cost and benefits of sustainable service delivery

## MEDIUM-TERM ACTIONS

- Develop water and sewer service standards for our customers
- Undertake regular service reviews, in accordance with IP&R requirements
- Regularly review water and sewer pricing structures and developer charges

and ultimately replacing the sewerage network, as well as the cost of treating and disposing of the waste. Larger commercial customers pay volumetric charges, reflecting the larger amount of waste they discharge to the sewer. Businesses who discharge liquid trade waste to the sewer are also charged for the volume of waste they produce.



## Reviewing water and sewer prices

To support our community's future growth and achieve the key environmental and service outcomes of this plan, Council will need to undertake a comprehensive review of its water and sewer prices. This will include working with our community to develop a triple-bottom-line approach to the true cost of the services we provide and the value of the social, economic and environmental benefits that these services bring. Although it is relatively easy to work out the cost of building a new sewage treatment plant or an off-stream water storage, putting a value on the benefits these assets bring in terms of improved environmental performance, economic stimulus and community lifestyles is more challenging.

Over the life of this plan, we will continue to work with our water and sewer customers and the broader community to develop equitable funding models that reflect local priorities. Although the Local Government Act allows local councils to pay a dividend from their water and sewer operations, Richmond Valley Council has no plans to do so over the life of this plan. All the money collected through water and sewer charges will be directed towards delivering the actions in this plan. Council will also continue to advocate strongly for greater funding support for major infrastructure investment from the NSW and Australian governments.



## NEXT STEPS 2024-29



### Investigate

Develop water and sewer service standards in consultation with our customers.



### Design

Develop a new water and sewer funding model, in consultation with the community, that considers the social, economic and environmental costs and benefits of our services.



### Objective #12

# WORK EFFECTIVELY WITH OUR PARTNERS

## The Big Conversation goes on... Measuring success

Our Water for Life 2050 Strategy is built on the key directions for growth and sustainability that were developed in consultation with our community for the Community Strategic Plan, Growth Management Strategy and Sustainable Communities Strategy. The 12 Objectives in this plan set the scene for further conversations and community engagement on our final water security options, demand management and environmental strategies and financial models. But there is still more planning and consultation to do. Council will continue to engage with our residential and commercial water/sewer customers and the broader community as we refine and adapt the key directions of this strategy over the coming years. We will also seek to draw on the knowledge of traditional custodians of the land, exploring opportunities through the NSW Aboriginal water engagement framework and the partnership model developed by Rous County Council.

Reporting to the community on our progress in delivering this strategy will also be important, as we achieve each of our major milestones. Because Water for Life 2050 is linked directly to our IP&R framework, the actions from this strategy will be incorporated directly into the Delivery Programs for each successive Council. This will ensure that the community receives six-monthly reports on progress, as well as an end of term assessment as part of the State of the Valley report. We will also include regular operational updates in our Council meeting reports.



## LONG-TERM STRATEGIES

- Engage with our community on key directions for water management
- Develop long-term working relationships with Rous County Council to improve regional water management and operations
- Work effectively with NSW regulators to deliver Council's water strategy

## MEDIUM-TERM ACTIONS

- Develop and implement a community engagement plan to support key directions in water management
- Explore opportunities to work with traditional custodians to share water management knowledge
- Provide regular information updates to our water/sewer customers
- Support delivery of Rous' Future Water 2060 strategy
- Explore opportunities for shared planning and resources with Rous to improve efficiencies
- Develop working relationships with regional representatives of DCCEW & EPA



## Working with our regional partners

Council is part of a wider region, and our future is entwined with those who share our water catchments and manage our regional water supply networks. Our water security challenges and environmental responsibilities go beyond the boundaries of our local government area and we must be prepared to work with neighbouring councils and other regional organisations to address these issues.

We rely on our partner organisation, Rous County Council, to deliver its vision for long-term regional water security and continue to provide bulk water to our Mid Richmond communities. A key focus for delivering this strategy will be working more closely with Rous and exploring opportunities for shared planning, advocacy and resources in the future.

## Working with our regulators

Water supply management is a complex issue and there are numerous NSW Government regulators involved in the process. Our regulatory partners include:

- WaterNSW – which has oversight of the river systems within NSW
- NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) and the NSW Department of Local Government which share oversight responsibilities for local water utilities
- NRAR – Natural Resources Access Regulator – which oversees water access licences and our operating rules for Jabour Weir
- NSW Fisheries – which also has a role in regulating the operation of the weir
- NSW Health – which has a key role in administering public health standards for regional water supplies.

## NEXT STEPS

2024-29



### Consult

Work with the community to further refine our key directions.



### Partner

Continue to build strong relationships with Rous County Council and our NSW regulators to support the delivery of our Strategy.

- NSW Environmental Protection Authority (EPA) – which oversees the Environmental Protection Licences for our sewerage systems.
- Building strong working relationships between Council and our regulators will be essential to delivering the ambitious infrastructure programs within this strategy and achieving improved environmental performance for our water and sewerage networks.







Design by Wild Honey Creative