

INFRASTRUCTURE STRATEGY



INFRASTRUCTURE STRATEGY 2021/51

Infrastructure investment underpins our standard of living and our ability to live, work and play.

LIFE IN THE CLUTHA DISTRICT WITHOUT INFRASTRUCTURE IS ALMOST UNIMAGINABLE

Our modern standard of living is made possible through the accumulation of infrastructure investment over generations.

We have drinking water in our homes, toilets that carry waste and disease away, roads everywhere, bridges, community centres, parks, and playgrounds and more, not to mention access to mobile phone signal and the internet.

One of Council's primary roles is managing infrastructure on behalf our community, for now and for future generations.

ABOUT THIS STRATEGY

This strategy identifies:

What we expect will be significant infrastructure challenges for Clutha District Council (Council) over the next 30 years,

Options we have for managing those challenges including their costs, and our preferred way forward.

The infrastructure categories included in this strategy are:

- Drinking water, wastewater and stormwater (known as the 3-Waters)
- Transportation (including roads, bridges and footpaths)
- Solid waste
- Community facilities.

This strategy is reviewed and updated every three years to make sure things are still on track and to incorporate new information in our ever changing world.

We've outlined what we believe are our likely to be our big issues and how we're proposing to manage them

We want to provide confidence about our future to the community, the government, and potential investors.

We aim to do this by:

- Clearly defining our desired standards of living, now and into the future
- Communicating our appetite for growth and development
- Examining the community's ability to fund infrastructure (linkages with Financial Strategy)
- Challenging Council's ability to deliver
- Producing a clear plan of action.

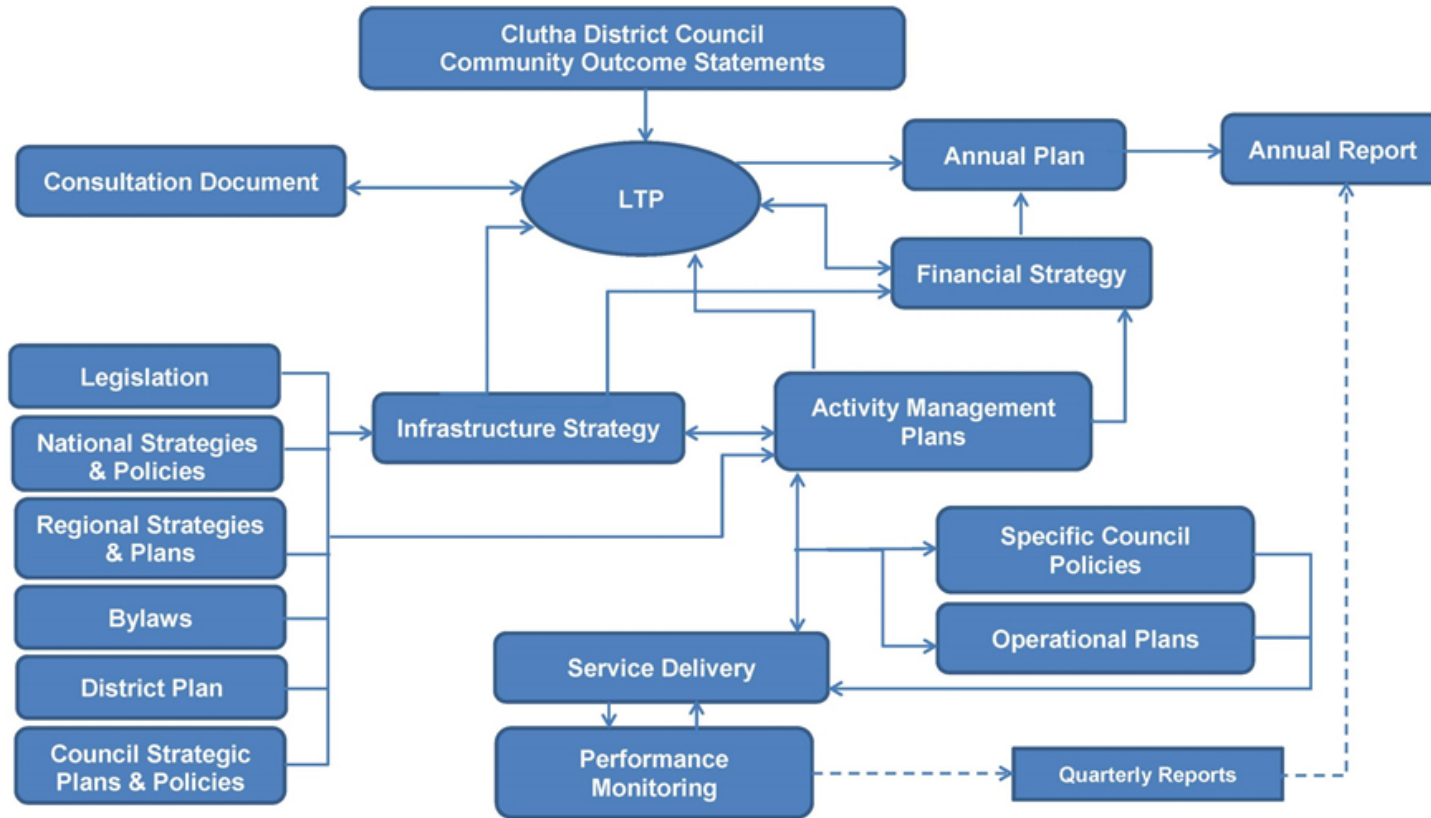
OUR FOCUS FOR INFRASTRUCTURE

We're focused on maintaining our key infrastructure for residents and future generations, and enabling investment where benefits are clear.

We will also look to facilitate growth where there is potential for this, to help achieve our goal of growing the population and the rating base. We acknowledge this is a medium to longer-term goal.

Council is also very focused on maintaining the affordability of its infrastructure.

LINKAGE WITH OTHER DOCUMENTS



Graph: Infrastructure Strategy Linkages with other Documents and Processes

WHERE WE HAVE COME FROM

Ka mua, ka muri - look to the past to inform our future

“Ka mua, ka muri” is a Māori whakatauki that translates roughly to “walking backwards into the future” - the philosophy that we look to the past to inform our future.

The story of the Clutha District is one of opportunity and adaptation. What we see in our past is that an abundance of natural resources drew people to the area - the hunters, fishers, whalers, miners, logging workers and farmers are testament to that. Our ancestors and pioneers created trade and prosperity across the district.

Early Māori roamed Te Tai O Arai Te Uru (Otago Coastal Marine Area) hunting and gathering and moving with the seasons. Those trails were the district’s first deliberate infrastructure. Then European whalers shipped tonnes of oil and whale bone across the world.

Gold and coal were mined; sawmills supported a booming trade in timber. Cleared land was used for farming, from which modern dairy factories and processing plants employed many people.

Underpinning all these activities was an ever-growing infrastructure of housing, riverways, roads, railways, bridges, and ferries, as well as drinking water schemes and wastewater systems.

Today, farming is Clutha’s primary industry. Its productivity is supported by an extensive network of roads and rural water supply schemes. In recent years, domestic and international tourism has become a significant economic driver of the district also. Now you can take your camper van on the Tuapeka Mouth ferry, walk to Nugget Point lighthouse, and cycle along the old hunting trails.

1200s to 1800s



Early Maori settled near fertile fishing and hunting grounds such as Kaitangata and the mouth of the Mata-au.

1868

1878



Opening of the current Balclutha Bridge was cause for great celebration.



Rural water schemes provide water for stock.



Tourism infrastructure such as walkways, cycleways, parking and public toilets support visitors to the district.

Networks of walking trails and canoe access

Whaling stations and primitive roads

Ferry at Balclutha

Roading network upgraded to support gold rush and logging

First Balclutha Bridge

GREAT FLOOD

Second Balclutha Bridge

Clutha Rail Bridge

Catlins River Branch Railway

Third Clutha Bridge

Farming becomes the District’s primary industry

Development of Three-Waters network

Rural water schemes

Roading upgrades for heavy traffic

Tourism infrastructure

Bridge upgrades

1788

Europeans arrived and set up whaling stations at Taieri Mouth, Port Molyneux and Tautuku.

1861

Gold is found at Gabriel’s Gully. A logging trade begins.



Roads are upgraded to allow horse and cart, then motor car.

1879-1971



The railway supports industry and connects people.



We have an extensive network of sealed and unsealed roads built to carry heavy vehicles like milk tankers and stock trucks.



Bridge upgrades ensure our roading network delivers the required level of service.

WHERE WE WANT TO HEAD

“It’s a simple choice really, to actively promote growth or be a bystander in our district’s future.”

Our district has changed considerably in the last 200 years. While it is impossible to predict exactly what the district will look like in the year 2051, we do know that some of the decisions made now will have an impact on that future.

What is also evident is that throughout our history, water, warmth, health, and connectivity has underpinned our prosperity.

So, the vision for our future is purposely simple:
Clutha is a great place to live, work, and play

Council will continue to facilitate growth and achieve our goal of growing the population.

We will continue to sustainably manage key infrastructure for residents and future generations throughout the district.

We will also invest to meet compulsory requirements, such as increasing standards for sewage discharges and drinking water.



Graph: Clutha District Strategic Framework

THE INFRASTRUCTURE WE TAKE CARE OF

Core Infrastructure	Vital Statistics	Value (\$M)	remaining life
Roads and footpaths	846km sealed roads 2,062km unsealed roads 144km footpaths 171km surface water channels 360 bridges and bridge culverts	923.6	64%
Water supply (urban and rural)	11 schemes servicing Balclutha, Kaitangata, Lawrence, Milton, Owaka and Tapanui, Clinton, Kaka Point, Waihola, Benhar, and Stirling. 11 rural water schemes: Balmoral 1, Balmoral 2, Clydevale-Pomahaka, Glenkenich, Moa Flat, North Bruce, Richardson, South Bruce, Tuapeka, Waipahi and Wangaloa. 2,684km of reticulation 16 treatment plants 46 pump stations	72.3	56%
Wastewater	11 schemes in Balclutha, Clinton, Heriot, Kaitangata, Kaka Point, Lawrence, Milton, Owaka, Stirling, Tapanui and Waihola. 201km of sewers 28 pump stations 1 treatment plant 10 oxidation ponds (5 with Biofiltro and 2 with membranes) 3 wetlands	51.2	57%
Stormwater	8 systems in Balclutha, Clinton, Kaitangata, Kaka Point, Lawrence, Milton, Owaka and Tapanui. 111km of pipes 4 pumping stations	15.1	47%

ACCURATE INFORMATION ABOUT OUR INFRASTRUCTURE

The information we have about the age, condition and performance of our assets are key factors in helping us make sound decisions around the timings of renewal, upgrade and disposal of assets. It is also important to calculate the annual use of the asset by residents and ratepayers, and calculate and fund depreciation accordingly.

All infrastructure assets are valued 3-yearly, which includes a formal assessment of their remaining life. For above-ground assets, assessments of condition and performance are relatively straight-forward and data is also updated as part of the maintenance and renewals process.

For underground assets (predominantly pipes) Council has an ongoing programme to monitor and improve the quality of the information we have. Condition assessments are undertaken as part of the maintenance contract as well as specific projects to assess vulnerable pipe classes e.g. asbestos cement (AC) cast iron and concrete.

As our infrastructure ages, so does the likelihood of their eventual failure. So we must prioritise the regular inspection of assets considered critical and nearing the end of their useful lives and combine this with engineering judgement to confirm renewals programmes.

For Transportation assets, we use the Roading Asset and Maintenance Management system or RAMM for short. This is a central database for storing information about these assets. RAMM includes a

schedule of all roads and footpaths on the network and detailed asset information such as road and footpath widths, surface types and ages. It also stores pavement details, traffic volume and loading information and condition data. Other assets are also recorded in RAMM such as signs, culverts, bridges and some greenspace assets.

The accuracy of the asset data in RAMM is a key component used in the development of forward works programmes for assets in the Transportation Activity Management Plan. This information is used

along with the knowledge of Council Staff and Consultants who have worked on the network for many years to ensure the programme is fit for purpose. The confidence level for all asset groups in RAMM is – Reliable. This is based on continual input of data into the system and recording of maintenance activities and other data.

The table below summarises the confidence level we have for the different classes of assets we take care of:

Asset Class	Confidence Level	Justification
3 Waters Reticulation	Reliable	Maintenance history of breaks for over 15 years has been captured and is used as a main driver for renewals. Known vulnerable materials such as AC, cast iron and concrete pipelines have had specific studies undertaken and are prioritised for renewals. CCTV work is undertaken periodically for assessment of gravity mains with the aim to assess the entire network over a 10-year period.
3 Waters Plant	Reliable	Reliability of information is variable on plant assets as the focus has been on compliance upgrades rather than routine renewals. These renewals are undertaken as plants are upgraded or the plant may be completely replaced. Very good information is known about recently renewed and assessed plants.
Transportation	Reliable	This is based on continual input of data into the system and recording of maintenance activities and other data such as cost activities and service requests.

PRINCIPLES OF INFRASTRUCTURE INVESTMENT

The 2018 infrastructure strategy signalled a sustained level of investment over the long term. This 2021 strategy continues this journey. Promoting growth is still our priority. This district has huge potential as a great place to live, work, play and invest. Our principles for investing in infrastructure remain unchanged, with a heavy focus on pragmatic expenditure and fiscal responsibility.

Decisions to invest in infrastructure are guided by a set of agreed principles.

1. Plan for and be adaptive to growth and enable private infrastructure investment where beneficial to the community.
2. Continue to focus on maintaining the infrastructure we have already invested in, and prioritise investment in infrastructure that balances cost, risk, and service levels.
3. Keep rates affordability at the forefront of our actions and decisions, and work to keep rates increases at a low level.
4. Use our solid financial position and existing infrastructure as a platform to enable growth.

LINKAGES WITH THE FINANCIAL STRATEGY

A 30-year strategy for infrastructure investment must be grounded in financial reality. The financial strategy (that directly follows this document) can be considered as the counterbalance by presenting financial consequences of the vision. It provides transparency and the overall direction through a set of financial aims and a financial vision for Council.

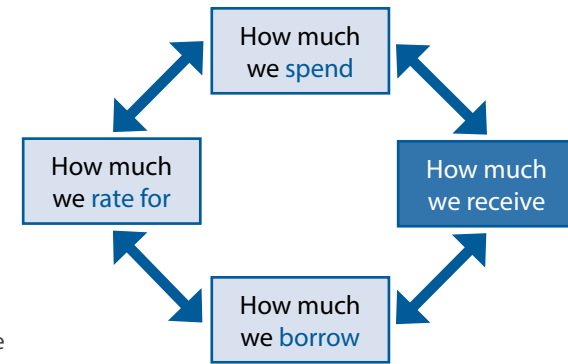
A well-balanced infrastructure and financial strategy ensures the right debate occurs and our community get the correct outcome.

Considering that infrastructure makes up close to 80% of Council's total expenditure, it is critical that these two documents are intrinsically linked.

The financial strategy has been structured around the three key drivers of infrastructure investment. These are:

- **Investment to Facilitate Growth**
- **Investment to Improve Levels of Service, and**
- **Investment to maintain what we've got.**

This infrastructure strategy encapsulates the broader vision, challenges and opportunities, bringing together our planned investments in these three areas.



Graph: Key Aspects of our Financial Mix

OUR INVESTMENT PRIORITIES

This section outlines the key investment priorities for each of Council's activities.

They are summarised below under the primary drivers of investment.

Priorities to Facilitate Growth

Our Approach: We plan for and be adaptive to growth and enable private infrastructure investment where it will benefit our community's well-being.

Key priorities include:

- Enabling growth in the Milton-Milburn-Waihola Corridor.
- Managing drinking water demand in our rural and urban water schemes, and where viable, supplying more capacity.
- We're also proposing a number of sewerage and water projects in other areas to help them expand. This includes in Balclutha, Kaitangata, Kaka Point and Tapanui.

Priorities to Improve Levels of Service

Our Approach: We prioritise investment in infrastructure that balances cost, risk, and service levels.

Key proposals include:

- Upgrading rural and urban water schemes to comply with NZ Drinking Water Standards.
- Upgrading wastewater infrastructure to improve the quality of discharges to the environment.
- Increasing the capacity of stormwater infrastructure to reduce the risk of localised flooding.
- Investing in the Milton main street improvements.
- Strengthening our bridges to carry high productivity motor vehicles.

Priorities to Take Care of What We've Got (Renewals)

Our Approach: We're aiming to have the funds needed to replace assets when they wear out (renew assets at the end of their economic life).

Key priorities include:

- Minimising the costs and impacts of our ageing infrastructure.
- Efficient road maintenance
- Continuing with our 'fast tracked' bridge replacement programme.
- Securing the future for Mt Cooe Landfill

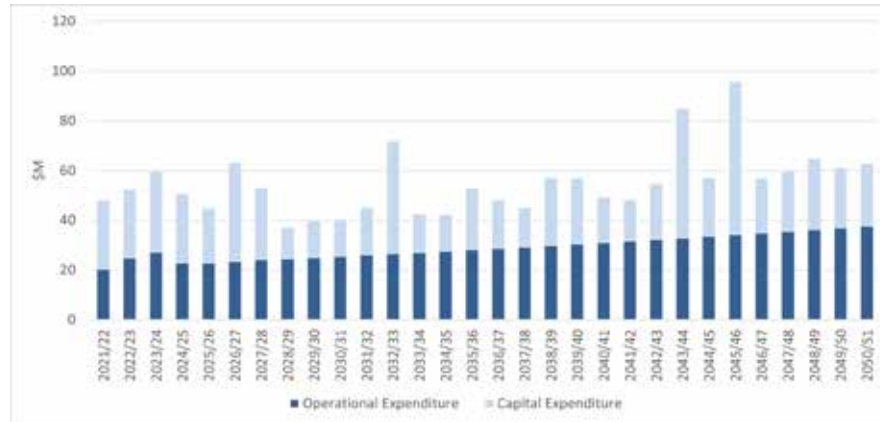
OUR INVESTMENT HORIZON

This section describes the expenditure which is planned throughout the next 30 years, based on the principles, assumptions and challenges identified in this strategy. A series of graphs are included, to help illustrate how much and when Council proposes to invest in infrastructure over this period.

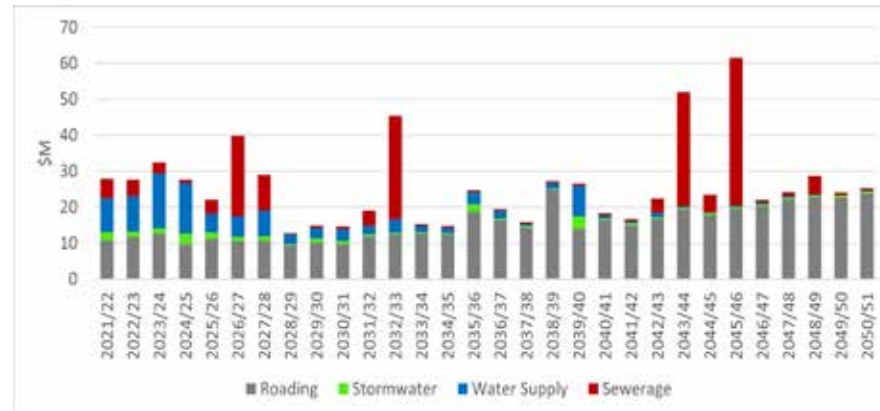
The forecast expenditure is significantly higher than historical expenditure. For each of the next five years, the forecast annual capital expenditure is over \$150M.

It is noted that the budgeted amounts include the effects of inflation (inflation rates are explained further in the accompanying Financial Strategy). The first graph summarises our 30-year horizon for both capital and operating expenditure for 2021-2051. Again, note that some of the increase in overall expenditure shown in this graph is due to inflation.

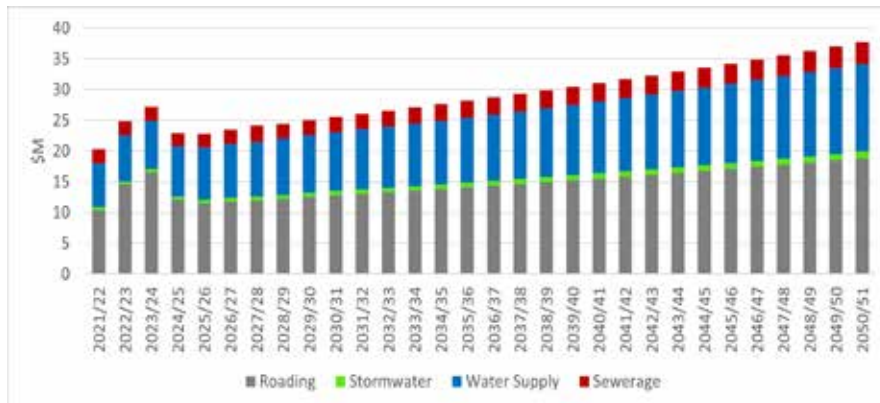
The plans and forecasts for the first three years have the most detail and confidence as the greatest amount of planning has taken place. The investments identified between four and ten years are an outline and have a reasonable degree of confidence. The forecasts beyond year 10 should be viewed as indicative estimates and will be developed further as time passes and more information is obtained.



Graph: Forecast Capital and Operating Expenditure for Infrastructure 2021/51



Graph: Forecast Capital Expenditure for Infrastructure by Category 2021/51



Graph: Forecast Operating Expenditure for Infrastructure by Category 2021/51

CHALLENGES TO MITIGATE

OUR CHANGING COMMUNITY

Like other rural areas in New Zealand, we have a relatively small, static, and ageing population. The average age of the population will continue to increase over the long-term, as is the case throughout New Zealand. In 2013 people aged 65 and over made up around 16% of the population; this is expected to increase to 32% by 2051.

Projected age changes indicate that the proportion of working age people (between 15 and 64 years) to non-working age will decline from 1.6 to 1.2 by 2051. This is much lower than the New Zealand average of 1.4.

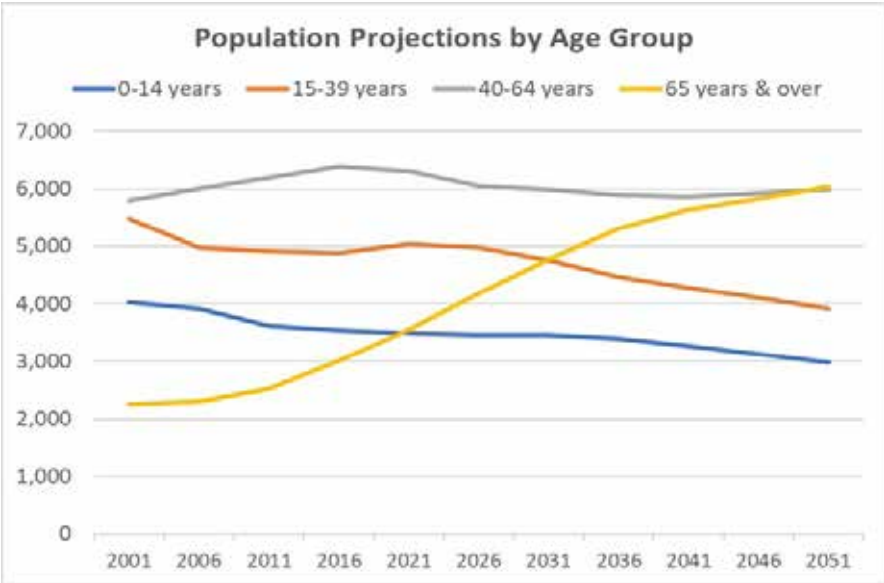
We know we need people of working age to move to the district to meet work force needs and to avoid the proportion of people over 65 increasing as quickly as forecast.

This is expected to affect the way Council delivers its services and the community's ability to pay. It is also anticipated demand will increase for community facilities and activities such as walking and cycling, as identified through the development of community plans for the district's main towns.

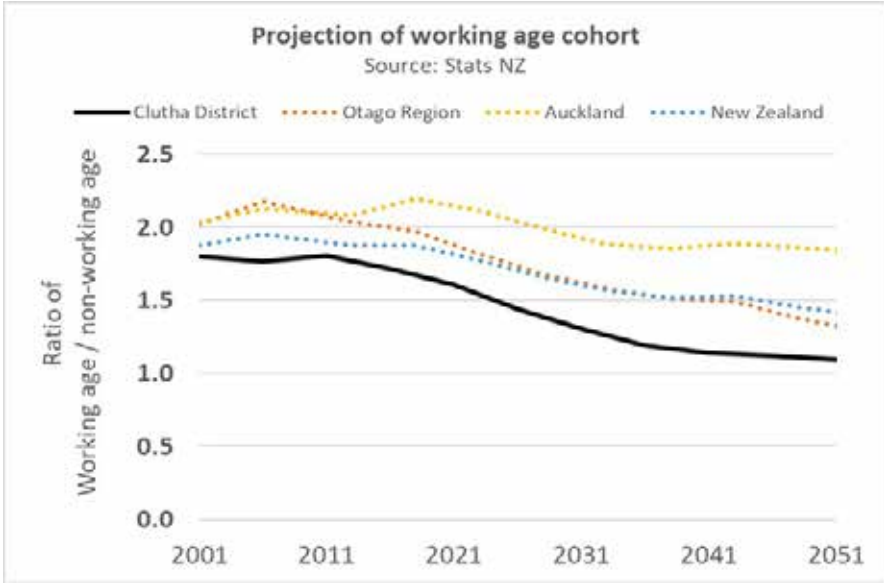
Initiatives such as Council's Living and Working in Clutha Strategy aim to attract more younger residents in the 15 to 64 age group to the district.

THE IMPACT OF COVID-19 ON INFRASTRUCTURE

While real annual GDP loss (in percentage terms) is the highest in tourism-centric regions (Queenstown-Lakes, Rotorua and Auckland), all regional economies of New Zealand are expected to contract due to the direct and flow-on effects associated with the COVID-19 restriction measures and weakened international markets. Our approach is to remain agile and responsive.



Graph: Clutha District Population Projection by Age Group



Graph: Clutha District Projection of Working Age Cohort

THREE-WATERS REFORM

Both central and local government acknowledge there are challenges facing local government water services and infrastructure, and the communities that fund and rely on these services.

Over the past three years, central and local government have been considering the issues and opportunities for regulating and managing the 3-Waters (drinking water, wastewater, and stormwater).

The Government inquiry into Havelock North's drinking water (following a serious campylobacter outbreak in 2016) identified widespread, systemic failure of suppliers to meet the standards required for the safe supply of drinking water. This has seen the Government progress a programme of 3-Waters regulatory reform, including the establishment in 2020 of Taumata Arowai, the new Water Services Regulator.

THE IMPACTS OF CLIMATE CHANGE

Clutha District will become warmer and wetter in the future, with more water likely flowing through the Clutha River. These changes may bring opportunities, such as improved winter pasture growth; however, they may also bring challenges such as a potential increase in flood frequency and severity.

Council commissioned investigative research during 2020 to understand the likely impacts of climate change to the Clutha district. The findings reveal that, overall, the Clutha District will become warmer and wetter over the next 70 years.

The key points to signal to the community and to underpin assumptions are:

- 1. More temperature extremes and dry days** up to 20 more hot days (days >30°C), and up to 50 fewer frost days (days <0°C), may be expected by 2090. The highest increases in temperature are predicted for West Otago. By the end of the century, The Catlins may experience up to four additional dry days per year, while the Clutha Valley, Milton and Waiholo areas are likely to experience fewer dry days and overall wetter conditions.
- 2. More Intense Rainfall and Localised Flooding** (where >25 mm of rain falls) are expected to increase (by 0 to 5 days), with the largest increases in The Catlins and over the Old Man Range by 2090. Rainfall totals during high intensity events are predicted to increase across the district, potentially leading to more frequent localised flooding.
- 3. Increased flood risk from rivers** The Clutha River is expected to experience an overall increase in river flow, especially during the winter and spring months, due to more precipitation in the upper catchment.
- 4. Coastal Risks from Rising Sea Levels:** Low-lying coastal settlements and the infrastructure that supports them will, over time, become increasingly susceptible to inundation. This includes low-lying parts of the Taieri Mouth, Toko Mouth, Kaitangata, Kaka Point, Pounawea and Jacks Bay settlements. Rural areas such as Molyneux Bay may also be affected.

This modelling, done specifically for our region, gives us the opportunity to make changes to our infrastructure over time that will help us continue to thrive.

However, the strategy assumes that the effects of climate change will be felt gradually throughout the period of this Infrastructure Strategy, allowing Council time to plan and prepare its response options around services and infrastructure. Council has begun working on its response to climate change. A key project is the Greenfield water scheme proposal.

RESILIENCE TOWARD NATURAL DISASTERS

While we can't predict exactly when earthquakes will occur, scientific research from AF8 (Alpine Fault Magnitude 8) shows the Alpine Fault has an unusually regular history of producing large earthquakes. Over the last 8,000 years, the Alpine Fault has ruptured 27 times - that's roughly every 300 years. The last significant earthquake on the Alpine Fault was in 1717 (+300 years = 2017). If the Alpine Fault continues in its regularity, the next severe earthquake could occur within the 30 years covered by this strategy.

The Clutha District is reasonably familiar with the effects of large flooding events. The overall risk to infrastructure is reduced somewhat because of our small and widely distributed communities. This reduces the likelihood of extensive damage across all critical infrastructure at the same time.

However, any major event would impact on Council through the need for immediate funding, and depending on the scale, duration and location of the event, there could be unforeseen costs in terms of damage to Council assets.

SKILLS SHORTAGES IMPACTING OUR SERVICE DELIVERY

Many councils throughout New Zealand are undergoing the same levels of sustained investment in infrastructure. Meanwhile, large swathes of the workforce are reaching retirement age. The immediate impact of border closures from COVID-19 further exacerbate this problem.

In recent years, Council has struggled to complete high proportions of its budgeted capital works. This is now at the point where we must prioritise investment by what can be physically delivered within available market capacity whilst investigating options to address the issue.

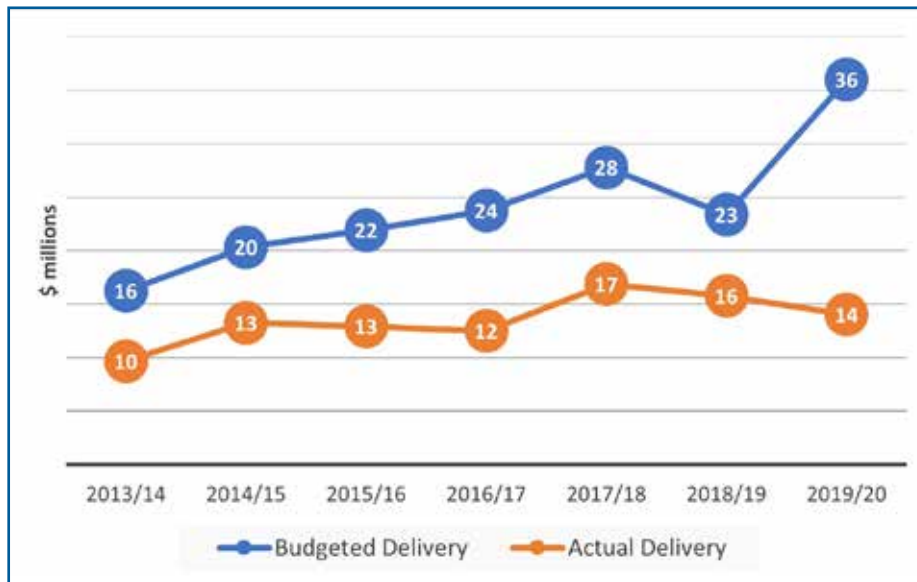
Council is limited in options to address this in the short term, other than to reduce spend to match delivery capacity. Longer term, several options are available to improve service delivery include:

- Shared services partnerships/agreements with neighbouring territorial authorities.
- Amalgamating small schemes to reduce costs and increase resilience.
- Improve the efficiency of our procurement processes and instill confidence in the marketplace to invest in capacity and skills.

SELF-IMPOSED RATES AND DEBTS LIMITS

We are aware that rates make up a significant proportion of the cost of living for many people. We have made a commitment to not increase overall rates by more than 4% per annum. We have a significant investment programme over the coming 30 years, and this limit may be in jeopardy in some years of this strategy. We update our financials on an annual basis and look at our mix to ensure we reduce year on year increases below 4%. We also have limits on the amount of debt we utilise to fund infrastructure investment.

Our Financial Strategy details how we ensure the prudent financial management by Council. It is detailed after this strategy.



Graph: Budget vs Actual Delivery of Capital Spend (\$M)

OPPORTUNITIES

LAND USE CHANGES

Recent District Plan changes for in Balclutha, Stirling, and Milton means areas of land in and around these towns rezoned to Urban, Transitional or Industrial Resource Areas. Most of this can be serviced by extending the existing infrastructure network, which is normally done at the developer's cost. This opens up more residential choices whilst sustainably managing the rural environment

In industrial areas, Council wants to understand what opportunities there are to provide more industrial land so that we can continue to attract businesses to our community, without compromising the amenity values of our urban areas (Our People, Our Environment).

We want to ensure our communities have the provisions to sustainably grow in the future.

LIFESTYLE REMOTE WORKING COASTAL AND MOUNTAINOUS LIFESTYLE

With a laptop and good internet connection, there are a growing number of people who can work from anywhere. The COVID-19 lockdown saw even more people take the leap into working remotely.

By ensuring there is affordable housing, good connectivity, and attractive amenities, there is a strong opportunity to attract young professionals, especially first-time buyers, to settle in the district as part of the Living and Working in Clutha Strategy.

FUTURE DEVELOPMENT - ROADS AND WATER EVERYWHERE

The district has a vast network of waters schemes local roads spread throughout the district. The network can carry large and heavy vehicles, meaning much of the productive areas are accessible. The district is also served by four state highways capable of carrying higher volumes of traffic throughout Otago/Southland region.

A rail freight corridor also runs directly through the district. It connects to Port Chalmers and further north and to Gore, Invercargill, and Bluff Port to the south.

The Clutha River / Mata-Au is the highest volume river in New Zealand, and the swiftest. There is potential for development alongside the river using its water or its powerful flow as a resource.

Where a significant decision relates to land or a body of water, Council will take into account the relationship of Māori and their culture and traditions with their ancestral land, water, sites, wāhi tapu, valued flora and fauna, and other taonga. This is an integral part of strengthening our partnerships with iwi and contributing to our cultural wellbeing.

VISITOR GROWTH

With border restrictions forecast to be in place until at least 2022, it may be a few years before we see international tourism return to pre-2020 levels. Despite this, the broader trend towards more tourism is expected to continue.

In the long term, global travel continues to become more affordable and the growing level of 'middle class' wealth throughout the world makes New Zealand increasingly accessible.

In line with our Clutha Destination Strategy 2020-30 we aim to manage the growth of respectful tourism. We will continue to improve infrastructure to support day visitors and longer stays including more rubbish bins, toilets, freedom camping areas, and dump stations. We will also work through the local Runanga to facilitate more inclusion of endorsed Māori heritage stories in site interpretation and tour/activity commentaries and seek to engage the Ngai Tahu Takiwa Tourism programme to establish Māori owned and operated tourism businesses in Clutha.

There is great scope for promoting our network of cycling trails, which have been hugely popular in neighbouring districts.

Our district's Clutha Gold Trail connects Lawrence with Roxburgh, and there are plans to extend the trail to the east (all the way to Lake Waiholo by 2022), putting it within easy reach of the coast.

DELIVERING WELL BEING THROUGH PROCUREMENT

In 2012, the budgeted 10-year spend on infrastructure (primarily physical works) was \$139m. The upcoming 2021/31 Long Term plan is projecting a spend of \$278m. This level of infrastructure investment is projected to continue for the long term (30 years). With such a large influence on the marketplace, there is a clear opportunity for Council to promote broader outcomes to its procurement practise.

Central Government is encouraging local authorities to start prioritising four priority outcomes within their procurement:

1. Increasing access for New Zealand Businesses

Agencies must consider how they can create opportunities for New Zealand businesses, including Māori, Pasifika, and regional businesses, as well as social enterprises.

2. Construction Skills and Training

The Government is committed to using its procurement to find ways to partner more effectively with the construction sector to grow the size and skills of New Zealand's construction workforce.

3. Improving Conditions for New Zealand Workers

The Government aims to improve conditions for New Zealand workers by requiring agencies

to ensure suppliers and their sub-contractors comply with employment standards, and health and safety requirements.

4. Reducing Emissions and Waste

The New Zealand Government is committed to achieving positive environmental outcomes through sustainable procurement by buying low emissions and low waste goods, services and works.

WHATS CHANGED IN THE PAST THREE YEARS?

This strategy picks up from where we got to in the 2018 Strategy, with a clear commitment to the District's future.

The long-term risks and challenges discussed in previous infrastructure strategies remain. Several have heightened in importance, while some new opportunities have arisen with the growth in tourism and new residents.

A summary of the key changes include:

- **Clutha District is growing** – The District's population grew slightly over the past 6 years. This was due to immigration of people into the district, which was a national trend.
- **More Work on climate change** – The risks to

the District from climate change have been more widely prioritised and modelled in more detail.

- **Focus on compliance** – Instead of taking "all practicable steps" we are now committed to delivering full compliance for national drinking water and wastewater discharge standards.
- **More information to help make decisions** – We've been improving how we prioritise taking care of our infrastructure (renewals), by gathering more information about them through condition assessments and the processes we have for balancing costs and risks.
- **Delivery on projects** – The infrastructure sector in Clutha and Otago/ Southland is experiencing a skills shortage which is influencing the viability and timing of project delivery.
- **Changes ahead for 3-Waters** – Central government has legislated for regulation and reform of the 3-Waters (drinking water, wastewater, and stormwater). This is still in progress but is likely to mean major changes in how these services are delivered for Council.

Global Pandemic – The change no-one can ignore is the immediate impact of a global pandemic. COVID-19 has created uncertainty in communities and business throughout the world.

TRANSPORTATION

Keeping our roads open, safe, and affordable is as important today as it was 100 years ago.

Our transport network serves the economic, social, and cultural needs of our people by providing efficient connectivity of people and places. It is also a link for longer journeys and for visitors who explore our district. From as far back as the early 1800s, our roads have been fundamental to the connectivity of people and the movement of goods around the district. Back then, it would take all day to move a mile. Today, our goods can travel across the world within 24 hours.

We are and will remain, a very large exporter of food and fibre products. We recognise that the transport network is the 'first mile' to our export markets.

The transport network includes more than just roads and cars. There are also footpaths, small culverts, streetlights, and other assets associated with the transport activity. The global trend of urbanisation is anticipated to continue leading to demand for shorter and more frequent journeys. Our urban centres are comparatively small to other metropolitan areas of New Zealand. We are increasingly recognising our role in facilitating the movement by many modes. Technological advancements such as ride sharing apps and e-bikes are rapidly increasing the options available and community expectations of mobility.

OUR ROADS HAVE ALWAYS BEEN THE KEY TO OUR PROSPERITY



Roads were lengthened and widened to allow ox and horse drawn carts to export produce like coal and timber in large quantities.



Early struggles with journey reliability in motorised vehicles!



Better roads enabled use of heavy goods vehicles.



Today's heavy vehicles can move vast amounts of produce quickly.



Safe and scenic roads encourage tourists to visit our district.

DELIVERING NEW ZEALAND'S TRANSPORT PRIORITIES

A major source of funding for our transportation network comes from Waka Kotahi NZ Transport Agency. A baseline level of funding (65%) is received for the operation, maintenance, and renewal of the existing roading network, as well as for improvements that meet the national outcome priorities. This co-investment now makes up a significant proportion of Council's overall roading programme.

Co-investment is conditional on the planned transportation activities delivering national priorities and criteria. It is very important we work collaboratively with Waka Kotahi to deliver these national priorities. These are set every 3 years through the Government Policy Statement on Land Transport.

SAFER TRANSPORTATION

New Zealand has often prioritised the fast, efficient movement of vehicles over the safety of people. Clutha District share and support the government's Road to Zero: NZ's Road Safety Strategy 2020-2030. Our shared vision is:

A New Zealand where no one is killed or seriously injured in road crashes. This means that no death or serious injury while travelling on our roads is acceptable.

Analysis of road safety data indicates that our district has a comparatively high level of risk on our low volume rural roads. This is where serious and fatal injury crashes mostly occur. Council is targeting a reducing trend of crashes on the network with no more than 10 fatal or serious injury crashes each year.

"We all make mistakes from time to time. We need to stop simple mistakes turning into tragedies."

Our priority areas of influence are:

- Safety treatments and infrastructure improvements on high-risk roads and along tourist routes
- Enhanced accessibility and safety within townships
- Tackling unsafe speeds on high-risk roads.

INVESTING IN TRANSPORT PRODUCTIVITY

High productivity motor vehicles (HPMV) are increasingly common across the truck fleet today. HPMVs carry much more freight than a typical truck. The ability to carry more freight from fewer movements improves the price competitiveness of our primary producers. It is our intention to promote HPMV access on specified permitted routes of our network and enable 50 MAX vehicles (vehicles with a maximum load of 50 tonne) to eventually cover the full network. The Government Policy Statement on Land Transport 2021 and our co-investor, Waka Kotahi shares this priority.

EFFICIENT ROAD MAINTENANCE

Improving the cost effectiveness of road maintenance translates into direct benefits to our community and our co-investors. It serves to keep our economy competitive by reducing business overheads, particularly for our primary producers.

We monitor our costs competitiveness with other comparative roading networks across New Zealand. Doing so incentivises us to be innovative and open to carrying some risk in order to deliver cost efficiencies.

Since 2015 Clutha’s approach to renewing the sealed road network has been aligned with the ‘sweating the

asset’ approach. This approach promotes timely and appropriate maintenance and renewals to prolong the roading network. It has successfully delivered a reduction in overall maintenance spends but also carries more risk of overall long-term network deterioration. has successfully delivered a reduction in overall maintenance spends but also carries more risk of overall long-term network deterioration.

This is a risk we are currently willing to accept and drives us to always seek new innovations and ways of doing things. We actively monitor the performance of our pavements and use advanced deterioration modelling techniques to signal when this strategy must adapt and change.

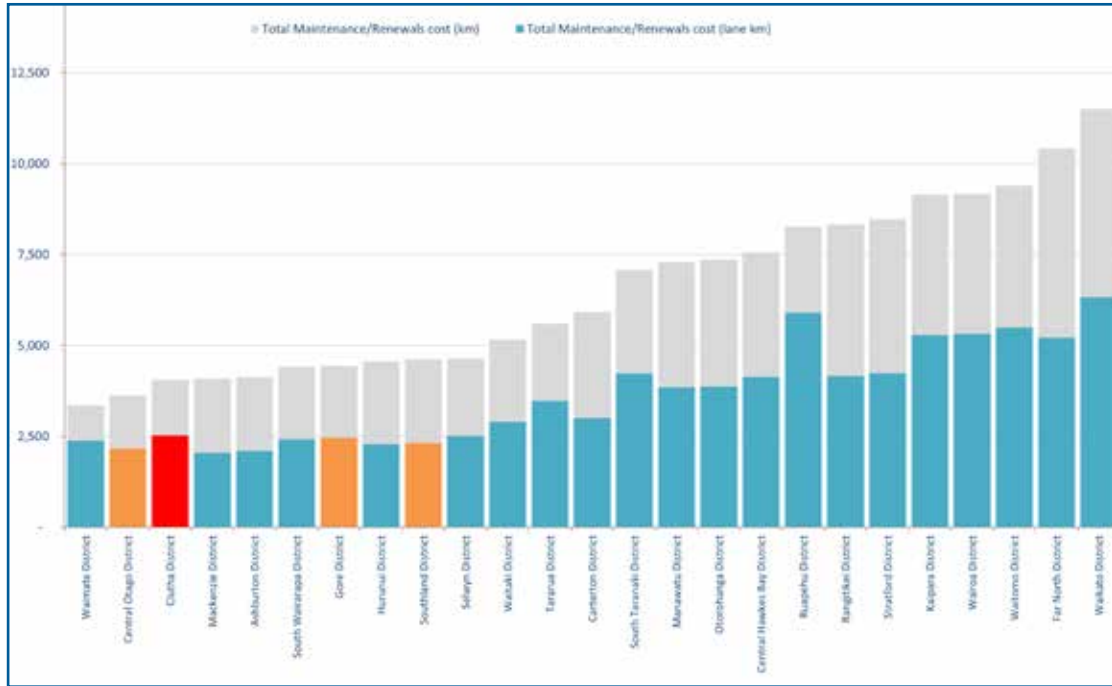
GETTING AROUND OUR TOWN CENTRES

There is increasing demand from communities for improved crossing facilities, public transport and lower speeds, especially around schools. Clutha’s aging population will exacerbate this.

Aging and cracked footpaths pose safety hazards to pedestrians. Clutha District and Waka Kotahi have recognised this risk and will progress the rate of footpath renewals over the next 10 years.

PREPARING FOR THE FUTURE OF ELECTRIC VEHICLES AND LOW CARBON TRANSPORT

Clutha District currently has four public EV charging points (Balclutha ,Lawrence Milton, and Tapanui) and intends to increase this number as a medium-high priority. Most electric vehicle (EV) charging happens overnight in people’s garages, but the most affordable and popular EVs still have a limited range of 250 km. Strategically, we will support providers, where possible, wishing to set up Electric Vehicle charging stations to help enhance a nationwide network.



Graph: Maintenance Operation & Renewal Expenditure Cost Per Lane km Comparison By Peer Group (\$)

3-WATERS

Safe drinking water and public sanitation enables us to thrive – people who are well go to school or work and add to the economic and social wellbeing of their community. Over several generations, our district has created drinking water schemes that supply thousands of people.

Waterborne diseases can have devastating effects on a community, as was experienced in Havelock North during 2016. The indirect consequences are still rippling through councils in the form of a new water regulator and reforms not seen since the 1989 amalgamations of local government.

SAFER DRINKING WATER AND A NEW WATER REGULATOR (TAUMATA)

Compliance with the NZ Drinking Water Standards is now a legal requirement. The level of treatment necessary in rural schemes depends on the quality of the water source. A larger water source and treatment plant is now needed for each rural scheme.

In September 2019, Cabinet agreed to create a new Water Services Regulator (Taumata Arowai) to enforce drinking water standards at a national level. It will ensure that councils have the funding and support to get the balance right.

A comprehensive programme of treatment upgrades has been approved by Council previously and is included in the first few years of this strategy.

SAFER DRINKING WATER \$18.1M

Compliance with the NZ Drinking Water Standards is a legal requirement. Council also has responsibility to keep rates as low as possible to support the economic well-being of the community. The level of treatment necessary is dependent on the quality of the water source.

GREENFIELD CLUTHA RIVER PROPOSAL \$14.5M

Compliance with the NZ Drinking Water Standards is a legal requirement. Council also has responsibility to keep rates as low as possible to support the economic well-being of the community. The level of treatment necessary is dependent on the quality of the water source. A larger and safer water source and treatment plant is needed for some schemes. The Greenfield proposal provides options for several of our existing rural water schemes.

1. Do nothing and accept the risk

Capital cost: \$0

Do nothing has been considered, but is not a valid option.

2. Carry out work to ensure national standards can be met

Capital cost: \$18.1M

Work is already underway and will include work to most of the 17 treatment plants throughout the district.

This is Council's preferred option

1. Upgrade each individual scheme source and treatment plant.

Continue with separate supplies and treatment plants for Balmoral 1 & 2 and Tuapeka East rural water schemes.

Capital Cost: \$7.5m

Ongoing Cost: \$3.0M`

2. Combine schemes to a high capacity, good quality water source and upgrade treatment plant.

Capital cost: \$18.1M

Work is already underway and will include work to most of the 17 treatment plants throughout the district.

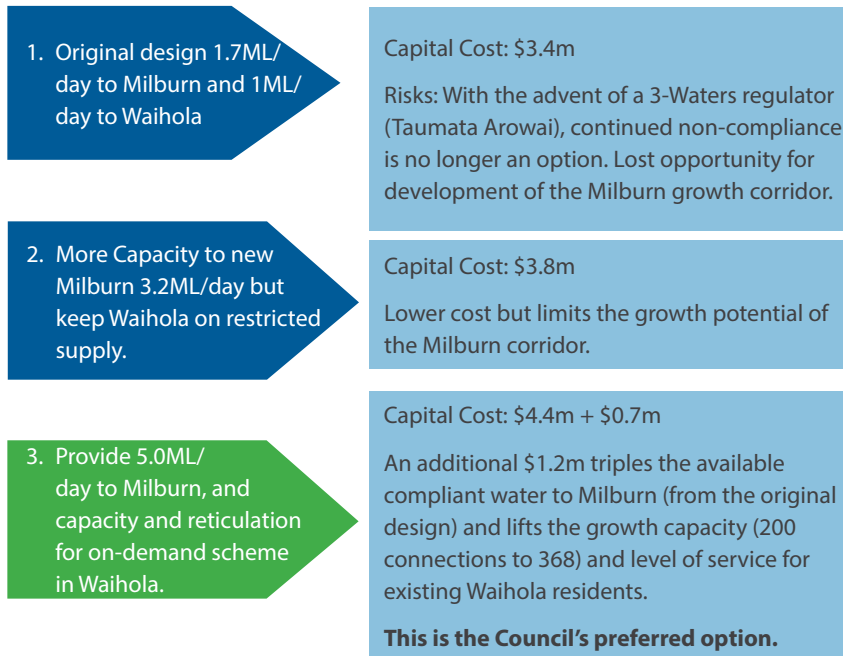
This is Council's preferred option

EXTENSIONS TO SERVICE GROWTH

New services are necessary to enable industrial growth in Milburn. Waihola also requires a better water source and more capacity to service growth.

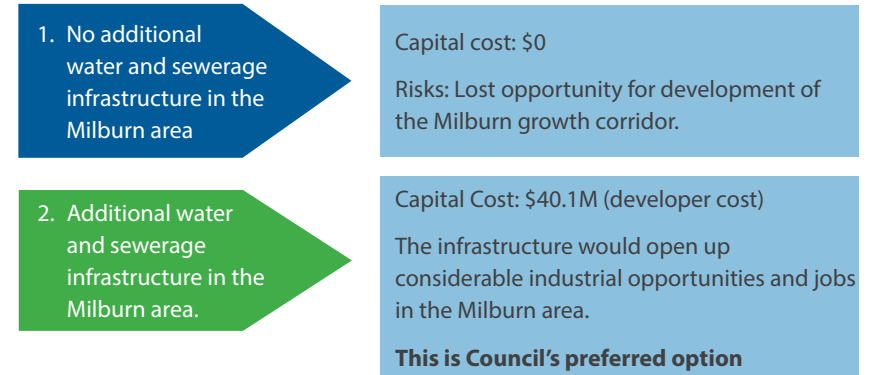
WATER FOR THE MILBURN WAIHOLA AREA

Originally planned in the 2018 as a means to supply Waihola with safe drinking water. But additional capacity is required for the Milburn Industrial Park development and to enable Waihola to be upgraded to an on-demand scheme from restricted. The existing Waihola scheme is at capacity.



MILBURN GROWTH CORRIDOR INFRASTRUCTURE

District Plan changes have paved the way to facilitate industrial development in the Milburn area. To enable this key water and sewerage infrastructure would need to be built, at the developer's cost.



INCREASING ENVIRONMENTAL STANDARDS FOR DISCHARGES

Acceptable standards of wastewater treatment have changed substantially since the days of early settlers discharging raw sewage into rivers!

The primary function of our wastewater networks is to uphold public sanitation by conveying waste away from habitable areas. Wastewater is pumped to a centralised treatment plant before being discharged into our waterways or directly onto land.

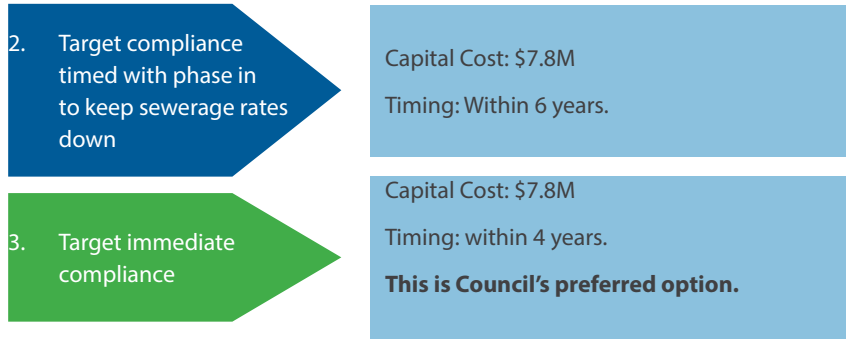
Council is required to have various resource consents in place for its treated wastewater discharges.

Several existing treatment plants do not comply with their existing resource consents and require immediate remediation. Many of these long-term consents require renewal over the next ten years. Wastewater treatment standards are also influenced by regional and national standards and will be part of the 3 Waters reform programme.

IMPROVING DISCHARGE TO THE ENVIRONMENT

Achieving high standards amidst a small rating basis requires innovation and good engineering. Several of Council's existing treatment plants were designed to work within these constraints, however, have not performed as expected. Approximately \$7.8M is needed to 1) bring existing plants up to meeting consent conditions, and 2) aim for consent for those that are currently going through the renewal process. The principal options below consider the timing of the compliance.

In many places around New Zealand treatment of stormwater is also required before it is discharged to streams and rivers. During a rain event, some removal of solids is achieved in street sumps. With the higher standards in place, further treatment of stormwater will be required in the future.



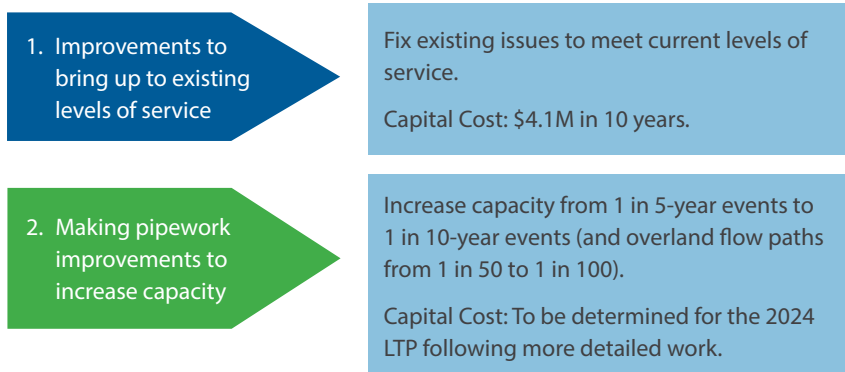
LOCALISED FLOODING RISKS

How we collect and dispose of stormwater run-off affects all our urban communities, so stormwater networks are key strategic assets that protect public health and property. Council aims to provide stormwater infrastructure that can manage a 1 in 5 through to 1 in 10 rainfall event in terms of our pipes. For overland flows this is between a 1 in 25-year and 50-year rainfall event. Several flooding risks exist in some of our smaller communities and a programme of upgrades is underway over the next 10 years.

The projects are in Milton, Owaka, Lawrence, Tapanui, Heriot, Clinton, Waiholo and Pounaweia. The proposed projects will mean a higher level of protection for communities during heavy rainfall events.

IMPROVING STORMWATER CAPACITY

The district's stormwater systems are coming under increasing pressure with more frequent flooding events. Levels of protection provided by the systems is under the microscope.



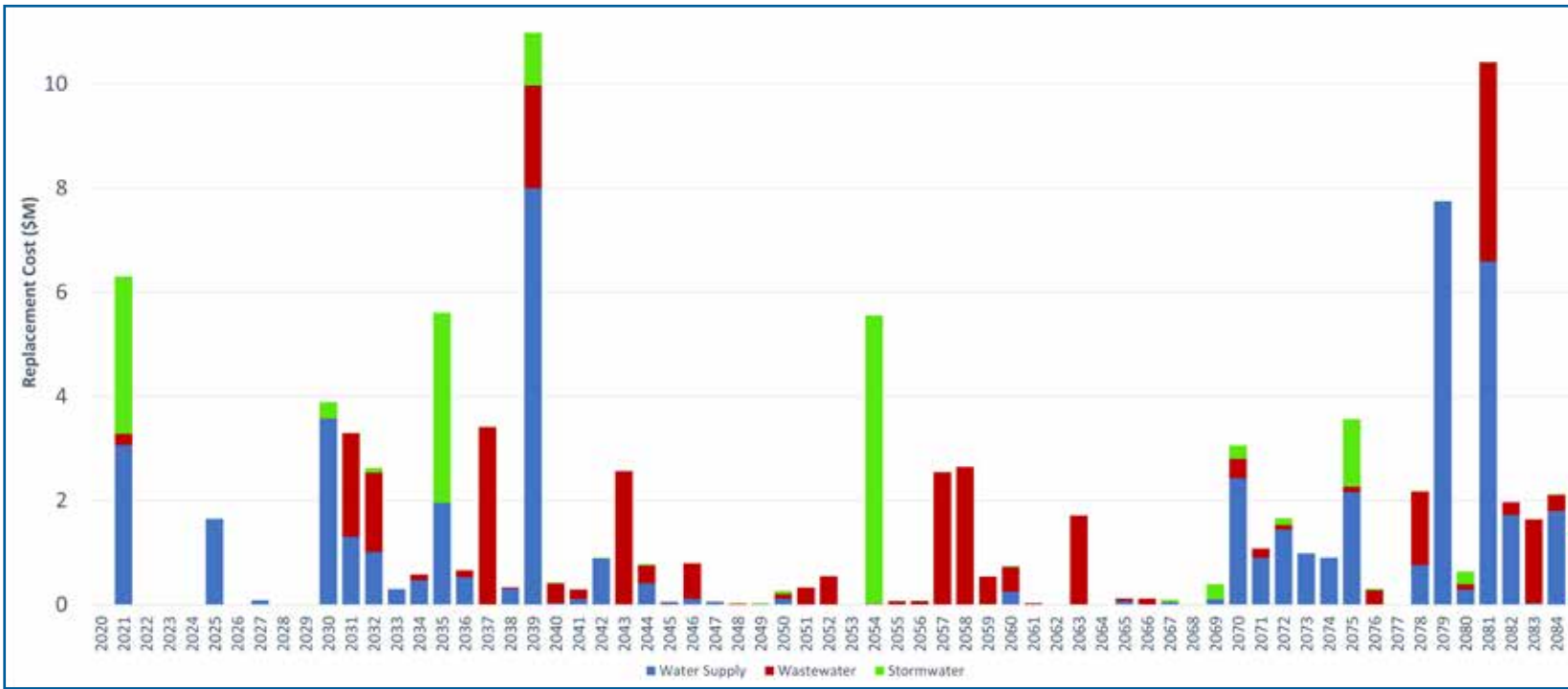
RENEWAL OF WATER, SEWERAGE AND STORMWATER INFRASTRUCTURE

The goal of a renewals programme is to correctly time replacements against their risk of failure and to maximise the savings from avoidance of ongoing repairs. Not completing renewals on time increases the risk of unexpected pipe rupture and a prolonged loss of service, as well as being more expensive to fix.

From a strategic standpoint, Clutha District is entering a long-term cycle of asset renewal, the timing of which, will echo the installation era of the 1950s through to the 1980s. The total replacement cost of the 3-waters reticulation network is approximately \$250M and the average age of the network is 54%. The level of collective risk of failure is increasing by the year.

The timing and rate of pipe replacements must also be considered within the context of the following factors:

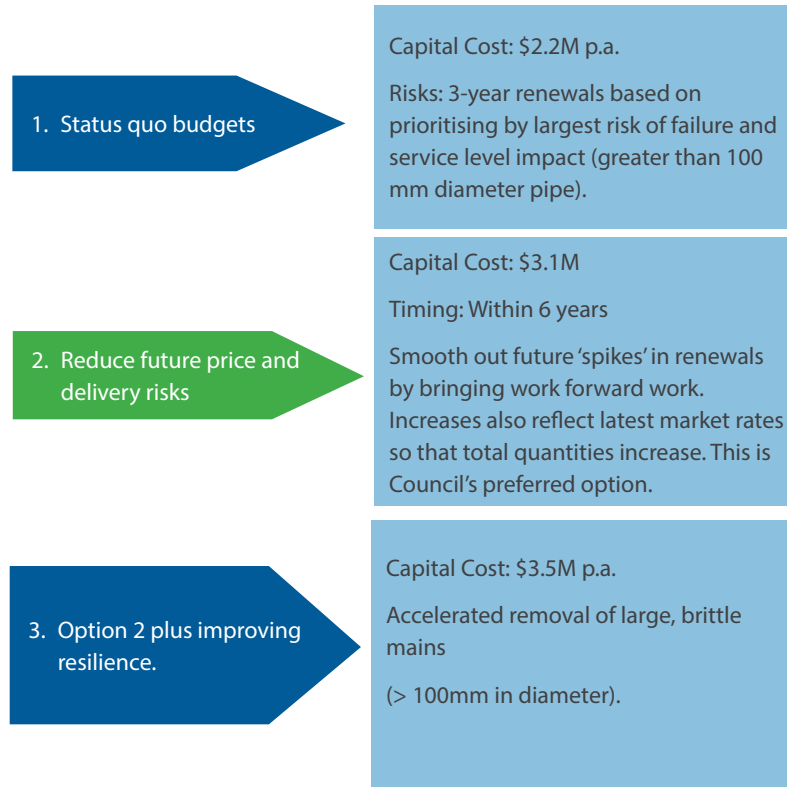
- **Network Stability** - We are entering the first of two distinct 'waves' with noticeable spikes (2039). If not managed, the frequency of failures will increase.
- **Pipe Replacement Costs** – The most recent 3W valuation shows replacement cost of pipes has increased by 20% since 2018.
- **Physical Works Delivery** – Historically, sporadic renewals and a competitive marketplace. Providing certainty and consistency of forward works is needed to generate efficiencies in procurement.
- **Resilience to earthquakes** – Corroded cast iron pipes can cause taste complaints while earthenware and asbestos cement perform more poorly than plastic during earthquakes. Proactive replacement of these materials should take place where possible. The principal options considered are focused on balancing affordability with the risk of unplanned of pipe failures and of earthquake response.



Graph: Forecast 3-Waters Renewals Profile (\$M)

RENEWAL OF RETICULATION ASSETS

Clutha District is entering a long-term cycle of asset renewal, the timing of which will echo the installation era of the 50s through to the 80s. As these 'spikes' or bow waves of renewals approach, they pose price, affordability and delivery risks (year 10 to year 30). Many of the large pipes are brittle materials. They perform poorly during and after major earthquakes compared to modern materials. Replacing pipes before they are due could both 'smooth' out the workload and reduce our exposure to response and recovery of a major event, improving our resilience.



SOLID WASTE

Council currently has responsibility for kerbside collection of waste and owns the districts only sanitary landfill at Mt Cooee, Balclutha. As well as duties under the Public Health Act, we also have legislative responsibility under the Waste Minimisation Act (WMA). The WMA encourages a reduction in the amount of waste we generate and dispose of through a levy per tonne of all waste disposed to municipal landfills. We are also responsible for all methane emission obligations from the Mt Cooee Landfill under the Emissions Trading Scheme.

Council's objectives for waste management and minimisation are:

- To reduce the harmful effects to the environment and public health from the generation and disposal of waste, and
- To increase economic benefit by encouraging efficient resource use.

WASTE MINIMISATION AND EFFICIENT RESOURCE USE

Currently Clutha we have comparatively low waste charges. However, regulatory costs to dispose waste to landfill are projected to increase. There is no longer a reliable market for the 3 to 7 recyclable plastics to be purchased, meaning it eventually ends up in landfill. Currently, we divert approximately 9% of all waste from landfill and the aim is to increase this with the introduction of a waste recovery park combined with an overall focus on longer term reductions. Strategically, our focus will be to invest in both supply side and demand side initiatives to manage the environmental and economic impacts of waste.

MT COOEE LANDFILL

The current resource consents will expire in 2023. Waste minimisation and recycling efforts have helped to slow the rate of landfill to 11,000 m3 of waste per year. We are on track to be able to accept waste until the expiry of its resource consent. Investigations into the renewal of this consent have taken place since the 2018. With investment, we will be able to secure access to a long-term, consented landfill site with at least 30 years of capacity on current demand. Combined with an increased investment in waste minimisation initiatives means residents and businesses are better enabled to continue with waste minimisation efforts while managing the cost impacts.

THE FUTURE OF MT COOEE

The current resource consents will expire in 2023. Current fill rate of 11,000 m3 suggests the 30 year consent will accommodate future demand.

1. Secure Long Term Consent (30-35 years)

Work was undertaken 2 years ago for the long-term consent renewal for the Mt Cooee Landfill with new lined landfill cells within current designated site. A resource recovery park and transfer station will also be built. Preliminary estimates for this is \$3.4M.

This is Council's preferred option.

2. Short Term Consent (approx 7 years)

Recent discussions with our current operator have raised the possibility of a short-term consent without a liner. At the end of the period, Mt Cooee would either be closed, or a new lined landfill consented.

COMMUNITY SERVICES

Future Proofing the District's Network of Halls

Halls provide a physical space for people to connect. They are an important part of our social wellbeing – supporting vibrant towns and communities in Clutha.

Council provides financial assistance for 11 rural committees that operate community centres on Council's behalf. It also assists other halls and centres that are owned and operated by their communities. Council will divest this infrastructure to the community as part of the Council's overall approach to halls.

For now, Council are providing a caretaker role and implementing a maintenance program for halls that ensures the structural integrity and protects public safety.

At the same time, communities are being encouraged to collaborate with Council to consider the spaces where they connect.

EARTHQUAKE STRENGTHENING

The approach for identifying and managing potentially earthquake-prone buildings is governed by the provisions of the Building (Earthquake-prone Buildings) Amendment Act 2016.

The system, which came into effect on 1 July 2017 focuses on the most vulnerable buildings in terms of people's safety. It categorises New Zealand into three seismic risk areas and sets time frames for identifying and taking action to strengthen or remove earthquake-prone buildings.

The Council's footprint is entirely located within the medium seismic risk area. This means we must identify potentially earthquake-prone buildings (EPBs) within 10 years and building owners must strengthen or demolish earthquake-prone buildings within 25 years.

COMMUNITY HOUSING

A key consideration in Council's 'Living and Working' strategy is looking at opportunities for keeping people in the district. Council's community housing units provide an affordable housing option for elderly and other vulnerable persons.

There are 98 residential units in the 11 community housing blocks, spread across 8 towns in the Clutha District. Demand for these units has increased in recent years and is expected to increase further with an aging population.

Council aims to provide community housing that is safe, secure, and healthy, and to maintain it in accordance with current legislative requirements. A programme of upgrades and additional housing is scheduled over the next 10 years and Council has confirmed that this activity will continue to be fully funded by rentals, with no rates subsidy.

PARKS, RESERVES, PLAYGROUNDS & SPORTS GROUNDS

Community spaces are also a component of our infrastructure that our communities care about. Future projects and plans continue to evolve, the most significant being the community-led redevelopment of Balclutha's Naish Park area.

SUMMARY OF KEY PROJECTS

TRANSPORTATION

Table 1 Major Roading Capital Expenditure

Period	Item	Value \$	Category
2021/23	Milton Main Street Upgrade	5.0M	Level of Service
2021/51	Sealed Road Resurfacing	117.5M	Renewal
2021/51	Unsealed Road Metalling	90.0M	Renewal
2021/51	Sealed Road Pavement Rehabilitation	67.0M	Renewal
2021/51	Bridge Renewals	21.5M	Renewal
2021/51	Low Cost Low Risk Improvements	37.8M	Renewal
2035/36	Papatowai Bridge	5.9M	Renewal
2036/37	Maclennan Bridge	3.2M	Renewal
2038/39	Clydevale Bridge	10.4M	Renewal
2043/44	Tuapeka Flat Bridge (462)	2.1M	Renewal
2048/49	Akatore Creek Bridge	3.4M	Renewal

WATER

Table 2 Major Water Capital Expenditure

Period	Item	Value \$	Category
RURAL WATER			
2022/25	Greenfield Water Supply	\$14.5M	Level of service
2023/40	Moa Flat AC Main and Reservoir Renewals	\$5.6M	Renewal
2022/40	Glenkenich AC Main Renewals	\$2.9M	Renewal
URBAN WATER			
2021/22	Kaitangata Treatment Plant Intake Renewal	\$1.0M	Renewal
2021/23	New Milburn Water Treatment Plant	\$9.0M	Growth
2021/23	Milton to Waihola Water Pipeline	\$4.6M	Growth
2022/27	Balcutha Cast Iron Pipe Renewals	\$4.2M	Renewal
2023/27	Kaitangata Water Supply Pipeline Renewals	\$1.8M	Renewal
2024/30	Balclutha and Milton Township Water Metering	\$3.9M	Level of service
2033/36	Milton Reticulation Network Renewals	\$3.7M	Renewal

WASTEWATER

Table 3 Major Wastewater Capital Expenditure

Period	Item	Value \$	Category
2022/30	Balclutha Sewer Network Renewals	2.5M	Renewal
2024/28	New Treatment Plant for Milburn industry	26.5M	Growth
2026/28	Waiholo Consent Renewal and Upgrade	4.5M	Level of service
2021/23	Balclutha Sewerage Treatment Plant Upgrade	4.5M	Level of service
2021/51	Districtwide Sewer Network Pipeline Renewals	2.1M	Renewal
2031/33	Balclutha Consent Renewal and Upgrade	4.5M	Level of service
2042/44	Milton Consent Renewal and Upgrade	2.1M	Level of service
2044/46	Kaitangata Consent Renewal and Upgrade	4.5M	Level of service
2044/46	Tapanui Consent Renewal and Upgrade	2.1M	Level of service
2044/46	Owaka Consent Renewal and Upgrade	4.5M	Level of service
2044/46	Lawrence Consent Renewal and Upgrade	2.1M	Level of service
2044/46	Kaka Point Consent Renewal and Upgrade	4.5M	Level of service
2033/40	Heriot Consent Renewal and Upgrade	2.1M	Level of service

STORMWATER

Table 4 Major Stormwater Capital Expenditure

Period	Item	Value \$	Category
2021/26	Milton Main Street Stormwater Renewals	\$3.1M	Renewal
2021/51	Districtwide Network Renewals	\$9.7M	Renewal

SERVICES WE PROVIDE

The Infrastructure Strategy assumes that the current activities, and their level of service will be maintained across the next 30 years.

TRANSPORTATION

The transportation network is a fundamental core service for Council. We have the third largest local network in the country, and roading accounts for over 40% of expenditure. It enables our farmers and other businesses to connect, conduct their business and generate substantial wealth for the district and the country. It also enables access for residents to meet their social, economic, and cultural needs. Our level of service commitment is:

WHAT WE'RE WORKING TOWARDS (level of service)	HOW WE WILL MEASURE PROGRESS (performance measure)	HOW WE'RE PERFORMING NOW	WHAT WE'RE AIMING FOR			
		2019/20	2021/22	2022/23	2023/24	2024/25 - 2030/31
Provide an effective and sustainable local roading network	Average quality of ride on the sealed road network (as per smooth travel exposure)	96%	≥96%	≥96%	≥96%	≥96%
	Percentage of the sealed local network that is resurfaced	6.2%	≥6.3%	≥6.7%	≥6.4%	≥6.5%
	% of customer service requests for roads and footpaths responded to within time frames	86%	≥95%	≥95%	≥95%	≥95%
Monitor safety and invest in improving the local roading network	Number of fatalities and serious injury crashes	9	≤10	≤10	≤10	≤10
FOOTPATHS						
Provide an effective and sustainable network of footpaths throughout the district	% footpaths that are in good, very good or new/near new condition*	92.9%	≥95.4%	≥96.6%	≥97.9%	100%
BRIDGES						
Provide a safe and economic network of bridges throughout the district	% of bridges on key routes that meet heavy vehicle (50 Max) safety requirements	90.3%	≥91.9%	≥92.2%	≥92.8%	≥94.7%

* Refers to sealed footpath condition standard ratings, where 1 is new or near new, 2 is very good, 3 is good, 4 is below average and 5 is poor.

3-WATERS

For a community to prosper, it needs to be safe and healthy. Safe drinking water, public sanitation and clean waterways is a critical enabler of a thriving community. Our level of service commitment are as follows:

WHAT WE'RE WORKING TOWARDS (level of service)	HOW WE WILL MEASURE PROGRESS (performance measure)	HOW WE'RE PERFORMING NOW	WHAT WE'RE AIMING FOR				
		2019/20	2021/22	2022/23	2023/24	2024/25 - 2030/31	
Water from Council urban supplies is safe to drink	Compliance with the NZDW Standards for bacteriological compliance	72%	100%	100%	100%	100%	
	Compliance with the NZDW Standards protozoal compliance	16%	≥95%	≥98%	100%	100%	
Urban supplies provide a continuous and reliable source of water to consumers	Number of drinking water complaints (Requests for Service) per 1000 connections about:	Clarity	8	≤17	≤17	≤17	≤17
		Taste	1	≤3	≤3	≤3	≤3
		Odour	1	≤2	≤2	≤2	≤2
		Pressure	6	≤5	≤5	≤5	≤5
		Continuity	20	≤30	≤30	≤30	≤30
		Council's response to any of these issues	25	≤14	≤14	≤14	≤13
	Average consumption of drinking water per resident per day (litres per day)	535	≤650	≤650	≤650	≤650	
Urban water schemes are managed efficiently and effectively	Median response time (in hours) from when Council receives notification about a fault or unplanned interruption to its network reticulation system to the time personnel reach the site	Urgent	4 hours	≤2 hours	≤2 hours	≤2 hours	≤2 hours
		Non-urgent	24 hours	≤24 hours	≤24 hours	≤24 hours	≤24 hours
	Median response time (in hours) from when Council receives notification about a fault or unplanned interruption to its network reticulation system to the time personnel confirm resolution	Urgent	21 hours	≤12 hours	≤12 hours	≤12 hours	≤12 hours
		Non-urgent	62 hours	≤48 hours	≤48 hours	≤48 hours	≤48 hours
Percentage of real water loss from Council's reticulation system (%)		36%	≤29%	≤29%	≤28%	≤27%	

WHAT WE'RE AIMING FOR

COMMUNITY OUTCOME: VIBRANT RURAL TOWNS AND COMMUNITIES

KEY PRIORITY AREA: (1) INVESTMENT IN INFRASTRUCTURE (2) HEALTHY SAFE COMMUNITIES

WHAT WE'RE WORKING TOWARDS (level of service)	HOW WE WILL MEASURE PROGRESS (performance measure)	HOW WE'RE PERFORMING NOW	WHAT WE'RE AIMING FOR				
		2019/20	2021/22	2022/23	2023/24	2024/25 - 2030/31	
Water from Council rural schemes is safe to drink	Compliance with the NZDW Standards for bacteriological compliance	36%	80%	94%	94%	100%	
	Compliance with the NZDW Standards protozoal compliance	0%	≥18%	≥66%	≥75%	100%	
Rural schemes provide a continuous and reliable source of water to consumers	Number of drinking water complaints (requests for service) per 1,000 connections about:	Clarity	19	≤12	≤12	≤12	≤12
		Taste	1	≤5	≤5	≤5	≤5
		Odour	7	≤3	≤3	≤3	≤3
		Pressure	87	≤200	≤200	≤200	≤200
		Continuity	573	≤200	≤200	≤200	≤200
		Council's response to any of these issues	22	≤14	≤14	≤14	≤14
Rural schemes are managed efficiently and effectively	Median response time (in hours) from when Council receives notification about a fault or unplanned interruption to its network reticulation system to the time personnel reach the site:	Urgent	19 hours	≤4 hours	≤4 hours	≤4 hours	≤4 hours
		Non-urgent	24 hours	≤24 hours	≤24 hours	≤24 hours	≤24 hours
	Median response time (in hours) from when Council receives notification about a fault or unplanned interruption to its network reticulation system to the time personnel confirm resolution:	Urgent	43 hours	≤12	≤12	≤12	≤12
		Non-urgent	48 hours	≤48 hours	≤48 hours	≤48 hours	≤48 hours

WHAT WE'RE AIMING FOR

COMMUNITY OUTCOME: HEALTHY SUSTAINABLE ENVIRONMENT

KEY PRIORITY AREA: (1) INVESTMENT IN INFRASTRUCTURE (2) AN IMPROVED ENVIRONMENTAL FOOTPRINT

WHAT WE'RE WORKING TOWARDS (level of service)	HOW WE WILL MEASURE PROGRESS (performance measure)	HOW WE'RE PERFORMING NOW	WHAT WE'RE AIMING FOR				
		2019/20	2021/22	2022/23	2023/24	2024/25 - 2030/31	
Provide sewerage services that effectively collect and dispose of sewage	The number of dry weather sewerage overflows from Council's sewerage system, expressed per 1000 sewerage connections to that sewerage system	0	≤6	≤6	≤6	≤6	
Sewerage schemes are managed efficient and effectively	Median response time (in hours) from when Council receives notification about a sewerage block or other fault, to the time service personnel:	Reach the site (response)	3	≤2 hours	≤2 hours	≤2 hours	≤2 hours
		Confirm resolution of the blockage or other fault (resolution)	7	≤8 hours	≤8 hours	≤8 hours	≤8 hours
	Number of complaints per 1,000 connections about any of the following:	Sewage odour	2	≤3	≤3	≤3	≤3
		Sewerage system faults	11	≤10	≤10	≤10	≤10
		Sewerage system blockages	8	≤5	≤5	≤5	≤5
		Council's response to any of these issues	3	≤5	≤5	≤5	≤5
	Compliance with Council's resource consents for sewerage discharge, measured as number of:	Abatement notices	0	0	0	0	0
		Infringement notices	0	0	0	0	0
		Enforcement orders	0	0	0	0	0
		Convictions	0	0	0	0	0

In December 2020 CDC was fined by the Environment Court arising from failures of maintenance at the Bio-Filtro plants of Stirling, Kaka Point, Tapanui, Lawrence and Owaka over the period July – December 2019. When the deficiencies were identified in December 2019 a significant programme of works was carried out over 2020 to bring the plants up to operational standards and eventually achieve full-compliance. Full compliance will require capital improvement works which is programmed over time.

WHAT WE'RE AIMING FOR

COMMUNITY OUTCOME: HEALTHY SUSTAINABLE ENVIRONMENT

KEY PRIORITY AREA: (1) INVESTMENT IN INFRASTRUCTURE (2) REDUCING OUR ENVIRONMENTAL FOOTPRINT

WHAT WE'RE WORKING TOWARDS (level of service)	HOW WE WILL MEASURE PROGRESS (performance measure)	HOW WE'RE PERFORMING NOW	WHAT WE'RE AIMING FOR			
		2019/20	2021/22	2022/23	2023/24	2024/25 - 2030/31
Provide stormwater drainage that protects against the effects of flooding	Flooding events to habitable floors due to overflows from a Council stormwater system (per 1,000 properties)	0	0	0	0	0
	Number of flooding events that occur in a territorial authority district (i.e. an overflow from a Council stormwater system)	11	<23	<23	<23	<23
	Number of complaints about the performance of Council's stormwater systems (per 1,000 connected properties)	2	≤10	≤10	≤10	≤10
	Median response time (in hours) from when Council receives notification about a flooding event to the time service personal reach the site	387 ¹	<4 hours	<4 hours	<4 hours	<4 hours
Compliance with Council's resource consents for discharge from stormwater systems, measured by the number of:	Abatement Notices	0	0	0	0	0
	Infringement notices	0	0	0	0	0
	Enforcement orders	0	0	0	0	0
	Successful prosecutions received	0	0	0	0	0

¹ Issues associated with the transition to a new contractor, and the impacts of COVID-19 on contractor resources, has impacted on the achievement of these performance measures.