

Part 3:

## Financial and Infrastructure Strategy and Statements





# Financial Strategy

## Introduction

The financial strategy outlines our overall approach to managing our finances. It sets our limits on rates increases and debt, illustrates the overall financial impacts of decisions made in the Long Term Plan and is key in demonstrating prudent financial management.

## Council key financial outcomes

Council aims to achieve the following financial outcomes over the next 10 years:

- Maintain a credit rating of at least AA (stable) from S&P Global.
- Generate sufficient funds to deliver the levels of service and undertake the capital investments within the 2021-2031 LTP.
- Minimise the impact on ratepayers through the appropriate use of reserves and debt, while ensuring intergenerational equity.
- Remain within a rates cap of the Local Government Cost Index plus 3%. The 3% comprises 1% for the cost of rising Government requirements and 2% for growth and improved levels of service.
- Remain within a debt cap of \$230 million, which is currently less than 10% of total assets, for the period covered by the 2021-2031 LTP.
- Maintain investments in MDC Holdings Ltd, Marlborough Regional Forestry, Local Government Funding Agency, and set aside easily accessible funds for emergencies.

A balanced budget is essential to achieving these financial outcomes, and Council has considered how to balance:

- the levels of service to be provided and the cost of achieving and maintaining them during periods of growth,

- the priorities and timing of expenditure across all activities, especially expenditure of a capital nature and the link to the Infrastructure Strategy,
- the proposed levels of rates and charges across the full 10-year period of the LTP and their impact on the community,
- the proposed level of borrowing that current and future ratepayers will need to service.

Overall, Council considers that it has successfully balanced these four key elements in preparing the draft Long Term Plan 2021-2031. Community input is welcome on how the current result contained in this LTP can be improved.

Council must, under the Local Government Act 2002, manage its revenues, expenses, assets, liabilities and general financial dealings prudently and in a manner that sustainably promotes the current and future interests of the community.

## Strategic direction of Council

Council's Mission Statement is set out on page 2 and Community Outcomes are set out on pages 24 of this Plan. Each Activity in this Long Term Plan identifies the outcomes that it contributes to.

## Outline of factors that are expected to have a significant impact on the Long Term Plan

### 1. Environment

Marlborough provides a unique lifestyle opportunity for residents and visitors with the full range of geological features from mountains to fertile plains, rivers and the magnificent Marlborough Sounds, coupled with high sunshine hours and available water. These features support a wide range of business and leisure opportunities. Business opportunities have predominantly centred on "land and sea" based activities i.e. viticulture, forestry, horticulture, pastoral farming, aquaculture, tourism and the servicing sectors. The common thread for almost all these activities is having a quality environment with an emphasis on

maintaining and possibly improving it. Availability of quality water is also a key factor.

### 2. Economy

The major industries identified above rely upon favourable international markets to provide a strong economic foundation for the District.

Infometrics' November 2020 forecast of GDP anticipates a decline of 5% over the year to March 2021. However over the year to March 2022, growth is forecast to swing marginally back into the positive with Marlborough's GDP growing by 1.2% and New Zealand by 1.0%.

To date Infometrics' predictions have proven pessimistic. Marlborough has a relatively diverse economy which provides a solid base for recovery from the impacts of COVID-19, with strong local and international demand for the District's wine, forestry and aquaculture. However the lack of international tourists is having an adverse impact on our tourism and hospitality sector.

With Marlborough having a trade based economy, much will depend on how quickly our major trading partners can address their COVID-19 issues and how well their economies weather the COVID storm.

### 3. Inflation projections

Council, along with the majority of other Councils in New Zealand, uses inflation projections provided by Business and Economic Research Ltd (BERL). These projections are used to inflate Council's forecast operating and capital expenditure in years two to 10 of the Long Term Plan.

BERL prepares projections for road, property, water, energy, staff, earth-moving, pipe lines and private sector wages. These are consolidated into an overall Local Government Cost Index (LGCI). To generate its forecasts, BERL estimates relationships based on historic data between price indices and a set of driver economic variables (e.g. GDP, employment, oil prices, construction, investment and CPI).

This year because of COVID-19, BERL provided three inflation scenarios, i.e. Stalled Rebuild scenario, Mid-scenario and a Faster rebuild scenario. Council is using the Mid scenario as it is seen by BERL as the most likely.

BERL comments;

*“that its mid-scenario might be thought of as a likely scenario. In line with the RBNZ scenario, the risks to this scenario are mostly on the downside. It is more likely that growth and employment is more likely to be lower than higher in this scenario. The assumptions are consistent with Treasury and RBNZ forecasts and include BERL’s adjustment for the historic record of time taken to recover from previous economic crises.*

*This scenario is likely to be applicable to most councils, and especially for those in areas that:*

- a) *Have a diverse economy without an overreliance on the worst affected industries of tourism and retail trade;*
- b) *Have relatively sound infrastructure and do not expect to engage in significant infrastructure upgrades in the next decade;*
- c) *Have a growing young population;*
- d) *Have a high proportion of employment in local and central government; and*
- e) *Have a high proportion of employment in knowledge work generally.*

*We expect that areas of New Zealand whose economies fit this description are likely to experience a prolonged but generally healthy recovery. This assumes continued support from local and central government”*

Currently BERL are forecasting the following combined and overall increases in its LGCI:

**Forecast BERL LGCI**

2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
3.7*	2.9	2.5	2.5	2.6	2.5	2.6	2.7	2.7	2.6

\*The 3.7% increase for 2021-22 is after a forecast decrease of 0.7% for 2020-21

These increases make up a significant portion of the proposed rates increase over 10 years of the Long Term Plan contained on page 211 of this Strategy.

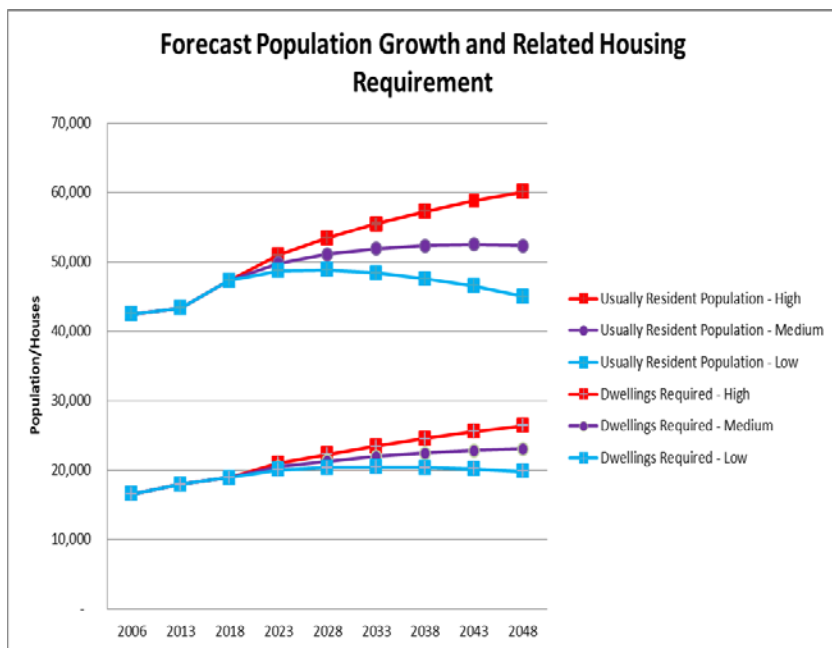
**1. Growth and population composition**

The number of people in the District, (both permanent residents and visitors), where they choose to live and the growth in economic activity directly affects the demand for land for development, infrastructure and other services the Council provides. This growth underpins land use planning, infrastructure developments, where and when new services and facilities are required and their cost.

In June 2020, Marlborough’s population was estimated at 50,200, an annual growth rate of almost 2% per annum over the 2013 census figure of 43,416. More than 60% of the Marlborough population lives in Blenheim, with a further 16% in Picton and Renwick. Most population growth since 2006 has occurred in Blenheim and Renwick. Although Picton has recently seen an overall decline in usual resident population, there was strong growth in Waikawa. Prime building land in Waikawa is becoming less readily available and future growth in this area may be limited.

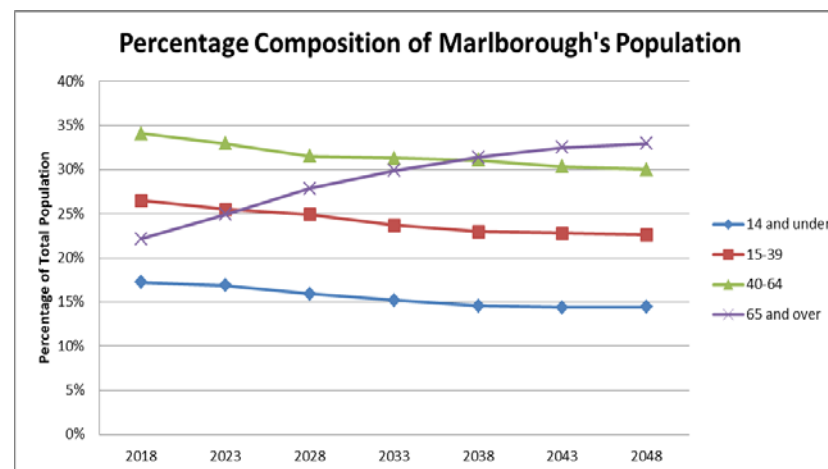
On 31 March 2021, Statistics New Zealand has provided a range of population projections. The low, medium and high growth scenarios for the Marlborough region for both population and houses are shown on the following graph. As the sunniest area in New Zealand, our climate, beautiful environments and healthy economy will continue to attract people to our area. This will help to counter balance the general trend for provincial New Zealand to loose population to the major centres.

Partly because of this uncertainty planners use the medium to high projection as a basis for planning future service provision in Marlborough. There are long lead-in times for major projects due to public consultation, land purchase negotiations, resource consent approval and construction. Planning conservatively for medium/high growth also provides some future proofing for assets that may have a useful life in excess of 80 years. **This approach has proved sound with Marlborough’s actual growth exceeding the “High” predictions.**



(source: Statistics New Zealand 2018-2048 projections)

Marlborough has one of the highest proportion of older people in New Zealand, with 20.5% of our population aged 65 or more in 2013. By June 2019 that had increased to 23% and is forecast to increase further to almost 35% by 2048. The change in Marlborough’s age distribution between now and 2048 is clearly shown in the graph below.



(source: Statistics New Zealand 2018-2048 projections)

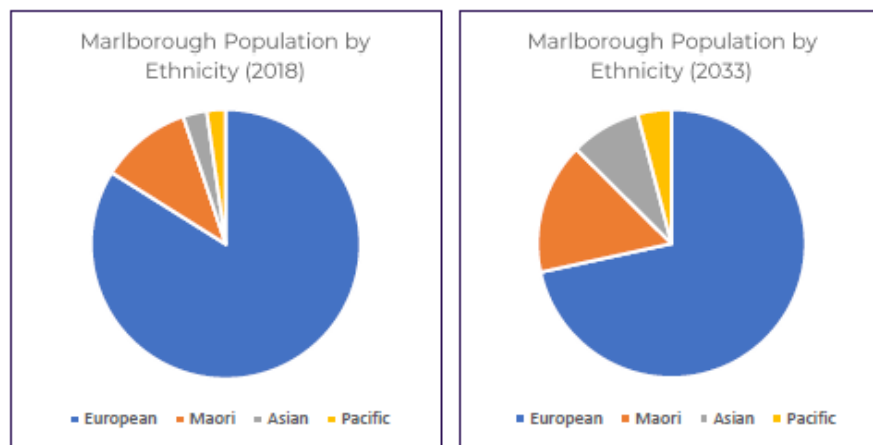
The increasingly elderly population and fewer working age people needs to be taken into consideration in financial planning, particularly when setting rates as affordability issues could arise as a large percentage of this group are on relatively fixed incomes.

The trend for growing urban centres and fewer people living in rural areas is expected to continue, as older people generally prefer to live closer to the services provided in larger centres. The provision of infrastructure in smaller settlements and the method of funding may need to be considered in the light of these projections. This may also result in new and or different levels of services being requested.

Older people are also more likely to prefer smaller houses and units, near the urban centres. Providing for this market could lead to urban intensification through regeneration of the existing housing stock.

Marlborough is also becoming a more ethnically diverse community. The Maori population is forecast to increase from 5,300(11% of the total population) in 2018 to 9,020 (16%) by 2033. Increases in other ethnic groups are also forecast to occur with the exception of NZ Europeans.

While NZ Europeans will still be making up the largest percentage of the population, it will drop from 84% in 2018 to 72% in 2033.



(source: Statistics New Zealand ethnic population projections)

Changes in the age of our population and increasing ethnic diversity could change the demand for different Council services.

Also changing are settlement patterns. The current urban settlement pattern consists of an average of 10-11 properties per hectare. The Development Contribution Policy helps to encourage urban infill by offering reduced charges for the subdivision of small residential sections. Urban intensification would help to reduce further urban spread and subsequent extension to the linear infrastructure. Costs per connection would decrease and improve the affordability of these services. According to historic Building Consent and Development Contribution information, growth is estimated to increase by 125 household equivalent units annually for the next ten years within Blenheim. This demand is expected to be much higher in the first few years, and drop off over time. Blenheim traditionally accounts for about 60% of all building consents for new dwellings, the remainder in the wider district.

Council believes that, as development increases the consumption of its current infrastructure capacity and accelerates the requirement for new

infrastructure, developers should bear the cost of this increased demand.

Through the application of its Development Contributions Policy to fund the cost of this additional infrastructure, Council is seeking to achieve an appropriate balance between encouraging growth and reduce the potential for additional burden on the ratepayer.

Undertaking development in a planned, co-ordinated manner can reduce costs as infrastructure development is not responding to “ad hoc requests” for isolated, scattered, piecemeal development. Responding to ad hoc development can mean that parts of the infrastructure networks are replaced earlier in their life than optimum while allowing other parts of the network to remain comparatively underutilised.

## 2. Government requirements

Currently existing government requirements are having a significant impact on Council’s cost structures. Government requirements affect the whole of Council, with requirements ranging from the level of training required for staff, to Traffic Management Requirements, to infrastructure standards to monitoring standards. The anticipated impact is of such significance that Council has increased its “Rates Cap” by one percent. In addition to known Government requirements, there are further National Environment Standards, Environmental Policy Statements, Resource Management Act reviews and the possible change in the delivery of the Three Waters. Council has included into its budgets the anticipated costs of delivering Government’s requirements where they can be identified with some certainty.

## Balancing the budget

The Council is required under the Local Government Act 2002 to ensure that each year’s projected operating revenues are set at a level sufficient to meet that year’s projected operating expenses i.e. Council must demonstrate financial prudence.

In assessing financial prudence consideration is to be given to:

- The estimated expenses and required revenue to achieve and maintain the predicted levels of service provision set out in the Long Term Plan, including the estimated expenses associated with maintaining the service capacity and integrity of the assets throughout their useful life;
- The equitable allocation of responsibility for funding the provision and maintenance of assets and facilities throughout their useful life;
- The funding and financing policies.

During the development of the 2021-31 Long Term Plan, the Council considered how to maintain its current levels of service, operating expenditure and capital expenditure needed to replace existing assets and provide new infrastructure and facilities to meet the levels of growth that are forecast within the 10 years of the Long Term Plan. The Long Term Plan as presented should, for the majority of activities, enable Council to maintain current levels of service.

The Council is forecasting that its Activity expenditure will increase from \$114 million in 2020-21 to \$171million in 2030-31 an increase of 50%. The increase is primarily due to investments in infrastructure including Community Facilities, improvements in levels of service, especially in the environmental and Solid Waste Management areas, the projected movement in the LGCI and additional central government requirements.

Borrowing over the period of the Long Term Plan will increase. Borrowings net of investments and debt raised on behalf of subsidiaries (Port Marlborough and Marlborough Airport) are proposed to increase from the \$84 million shown in the 2020-21 Annual Plan to \$234 million in 2030-31 year, to fund a \$729 million capital program. Council is anticipating that it may be outside this “Cap” from 2027 onwards, but in reality this should not occur if the Three Waters assets and related debt are transferred to new entities as currently proposed by Government. Also based on the experience gained from Council’s previous plans actual requirements are likely to be less than currently forecast.

Much of the increase in debt has been driven by Council’s need to invest in infrastructure. Investment is needed to renew assets that are reaching the end of their economic life, to meet new standards and Resource Consent conditions and growth. Marlborough is currently experiencing higher levels of population growth than has been the case over the not too distant past. Higher levels of growth increases the demand for additional Council infrastructure and while the growth component is paid for via Development Contributions in the long term, Council must fund the cost upfront.

Development contributions have been reviewed accordingly to fund growth related `expenditure. The “Financial Trends and Summaries” section of the report below provides the extent of capital works and the funding sources.

Under section 101 of the Local Government Act 2002, Council considered its financial management responsibilities where it must manage revenues, expenses, assets, liabilities, investments and general financial dealings prudently and in a manner that promotes the current and future interests of the community. The Council also considered whether it was sustainable to undertake the level of capital expenditure proposed in the Long Term Plan together with increased operating costs associated with the higher debt level. If the Council has too much debt then future ratepayers will subsidise current ratepayers. If population growth, which is expected to fund the growth portion of assets incorporated into the capital expenditure programme, does not occur or occurs at a slower rate this may either increase rates or slow the delivery of capital projects.

The policy of fully funding depreciation except for Community Assets has been continued in the Long Term Plan and is considered an appropriate measure to ensure the concept of intergenerational equity is maintained. That is, current ratepayers will pay for its use and a share of its replacement cost in relation to the assets provided.

In summary, the rate movements have been affected as a result of:

- Price increases – cost adjustors (inflation) that have been applied to the estimates within the Long Term Plan.
- Growth – while development contributions fund much of the growth related capital expenditure, additional developed land and services need to be maintained and add to the Council’s operational expenditure. Generally the additional costs are met by the rates recovered from the extra ratepayers.
- Service levels increases – for some services, such as water supply, sewerage and environmental activities, a greater total rate take will be required.
- Depreciation and interest payments – the increased capital expenditure programme will mean that there will be a corresponding increase in depreciation and debt servicing costs that will be required to be met through fees and charges and rates.
- Additional central government requirements.

### Rates, rates increases and rate increase limit

Council is very conscious of the impacts of rates increases in the community, the community’s wish to maintain or enhance current levels of service and the underlying cost drivers that Council has limited ability to control. The underlying cost drivers particularly relate to the materials that go into building and maintaining infrastructural assets i.e. diesel, bitumen, pipes and other construction materials. Council has reviewed the Capital Expenditure Programme and looked to defer projects where possible without significantly affecting levels of service.

Existing Reserves and Development Contributions are the first sources for funding capital expenditure. The balance is generally funded by loans, predominantly on a 20 year table mortgage basis. Loans have a rating impact, but as their repayment is spread, they reduce the burden on current rates and spread the costs over those future ratepayers who will also benefit from the asset being created. Increased operating and in the longer term maintenance costs also result.

Because Council’s costs are not the same as the costs faced by households e.g. food, housing, transportation etc as measured by the CPI, Council has decided to use the specifically developed LGCI as its inflation benchmark. It has further decided that it will aim to keep increases in total rates below the LGCI movement plus 3%. Council has decided to lift its previous “Rates Cap” to recognise the additional costs being imposed on Council by central government. The following table shows forecast rates increases, LGCI movements and the difference between the two showing where Council has exceeded the LGCI plus 3% stated above.

The impact of the voluntary targeted rates (clean heating and irrigation) has been removed as they only affect a relatively small number of ratepayers and are only incurred after voluntarily agreeing to receive the service.

The table shows that Council is outside its “Rates Cap” between 2023-2026. In 2023 and 2024 Council marginally exceeds the rates cap due to operating costs associated with an increased capital programme. In 2026 the cap is slightly exceeded due to the start of the Flaxbourne voluntary targeted rate.

In 2025 the main reason is cessation of assistance from the COVID Rates Relief Reserve. Recognising that the impact of rates increases on the community, Council has decided to establish a new Reserve called the COVID Rates Relief Reserve funded by anticipated unallocated revenue from river leases and subsidiary dividends. Council also decided to make allocations from this Reserve for a period of three years. Three years was decided as it is hoped that COVID will be well behind us by then and the likely Government reforms on the delivery of the Three Waters will prompt a significant review of the whole structure of Council’s rating.

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Average
Rates	5.1%	6.4%	5.7%	9.7%	5.7%	4.3%	3.7%	3.9%	4.1%	3.2%	5.2%
Rates Cap	6.7%	5.9%	5.5%	5.5%	5.6%	5.5%	5.6%	5.7%	5.8%	5.6%	5.8%
Above/Below Rates Cap	1.6%	-0.5%	-0.2%	-4.2%	-0.1%	1.2%	1.9%	1.8%	1.7%	2.4%	0.6%

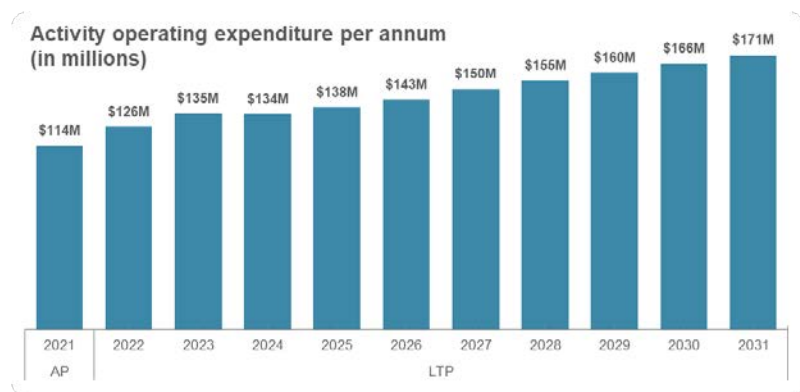


The amounts shown above are the total rates increases across the District. There will be properties that will pay less and others that will pay more, depending on the services that they receive. Samples for areas across the District are provided within the Long Term Plan, “Rates Movements” section. The other point to note is that while this document sets out Council’s plans for the next 10 years, each year it reviews its priorities and need to undertake capital projects with the objective of reducing rates.

### Financial trends and summaries within the ten year plan

#### Operating expenditure

The following graph shows that total Activity related operating expenditure is forecast to increase from \$114 million in 2020-21 to \$171 million in 2030-31 an increase of 50%.

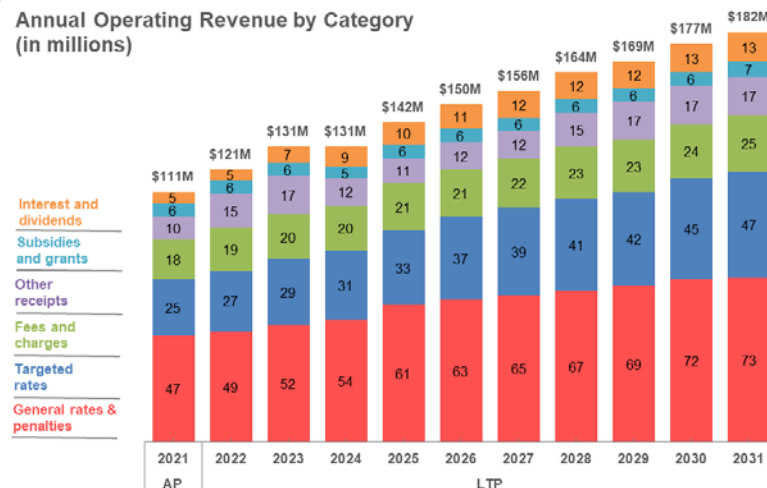


#### Operating revenues

Total Operating revenue (from the Funding Impact Statement) is forecast to rise from \$111 million in 2020-21 to \$182 million in 2030-31.

The following graph shows the sources of operating revenue throughout the Long Term Plan.

Annual Operating Revenue by Category (in millions)



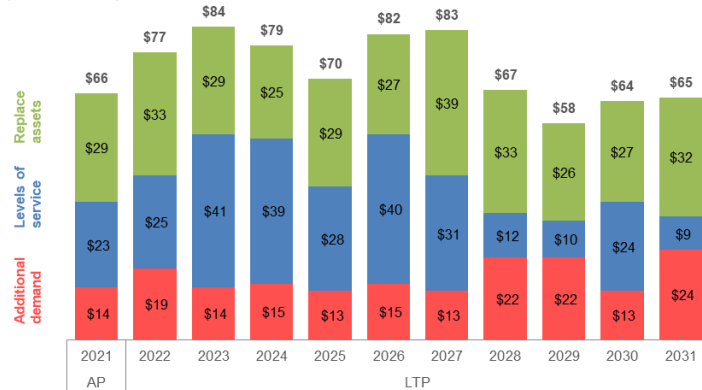
#### Capital expenditure

The Council currently has assets worth almost \$1.6 billion. During the next 10 years the Council is planning to undertake capital expenditure of:

- \$170 million to meet additional demand (including vested assets)
- \$259 million to improve the levels of service
- \$300 million to replace existing asset
- \$729 million in total

The following graph shows the amounts being spent on each capital expenditure category to meet community expectations (levels of service), replacement of existing assets and additional demand/growth over the Long Term Plan.

**Annual Capital Expenditure by Category**  
(in millions)



In each Activity section there is a list of major capital projects planned over the 10 years of the Long Term Plan. A number of these projects have been spread out to coincide with growth, need and/or affordability.

### Capital funding sources

The following graph shows the capital funding sources planned to fund the capital expenditure.

**Annual Capital Funding Sources**  
(in millions)



### External debt

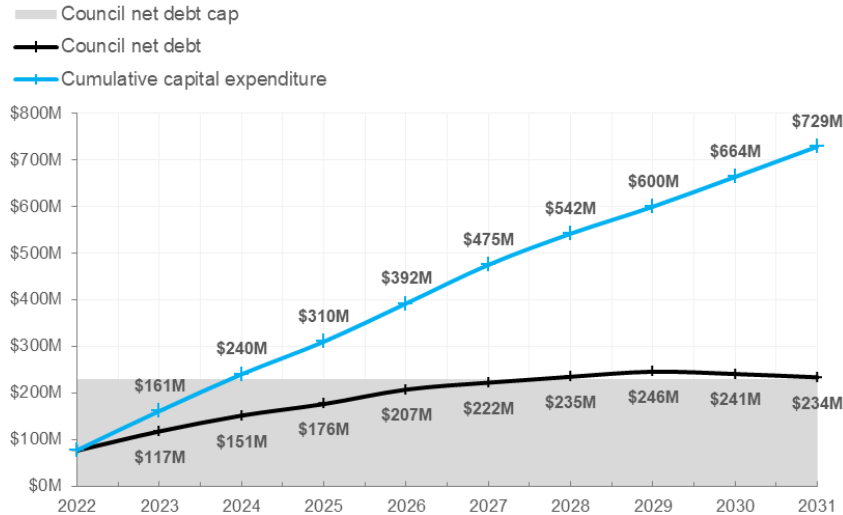
Council will continue to take advantage of the current low interest rate environment as it looks to increase its debt, by locking in longer term rates where possible.

External debt is only raised after development contributions, reserves and other funding sources have been used. Despite using external debt as a last resort, net borrowing is proposed to increase from the \$84 million shown in the 2020-21 Annual Plan to \$234 million in 2030-31 year, to fund the \$729 million capital program. However, as stated earlier in actuality this level of debt is very unlikely.

Note these values are Net Debt, after deducting the \$12 million of investments held as part of its disaster recovery planning and the borrowings made on behalf of the 100% owned MDC Holdings Ltd Group, which includes Port Marlborough NZ Ltd and Marlborough Airport Ltd.

The graph below shows the trend over the Long Term Plan for Council's net debt and cumulative capital expenditure. This graph includes an allowance for price movements based on the BERL forecasts. This graph clearly shows the capital expenditure programme in the initial years is linked to a corresponding movement in loans required to fund this work. In outer years depreciation on the increased asset base funds capital expenditure and there is a reduced reliance on debt.

### Council net debt compared to cumulative capital expenditure (in millions)



### Debt levels and interest costs

The Council Treasury Policy includes the Investment and Liability Management Policies. The Council has established a net debt cap of \$230 million.

Council has adopted the LGFA's borrowing covenants in accordance with advice received from the Council's Treasury Advisor.

The Council is a shareholder and lender of the LGFA. This has enabled Council to achieve a lower cost of funding. The Council comfortably meets all the covenants the LGFA has set for Councils to borrow from it.

The table below identifies each covenant and how Council compares against each one.

FINANCIAL COVENANTS	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Net debt / total revenue <250%	54%	84%	108%	116%	128%	132%	133%	136%	129%	122%
Net interest / total revenue <20%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Net interest / annual rates income <30%	4%	5%	6%	5%	5%	5%	5%	5%	5%	5%
Liquidity > 110%	153%	136%	129%	125%	121%	120%	119%	118%	119%	119%

### Security on borrowing

The Council generally does not offer assets, other than a charge over rates or rate revenue, as security for general borrowing programmes through its Debenture Trust Deed.

### Limit on borrowing

Borrowing is a means by which those who pay the cost of providing an asset can be better matched with those who benefit from the use of these assets.

Current ratepayers may form the view that borrowing is the answer to reducing rates increases. However, borrowing is not without cost. The immediate cost is interest. The less obvious costs are:

1. The loss of flexibility Council would face if debt levels rose too high. At the extreme is when Sovereign nations are directed to undertake certain actions by their bankers as happened in the GFC. In Council's case it would be by its Debenture Trustee.
2. Council and, as a consequence, ratepayers are impacted upon more severely by increases in interest rates.

As a result Council must also look to keep debt within acceptable levels. The best way of doing this is to constrain capital expenditure. Council has done this by managing its investment levels in Capital Projects.

There are a number of benchmarks that exist for evaluating if Council's proposed level of debt is too high. These include obtaining a credit

rating and adopting the LGFA's parameters as set out above. Currently Council has AA+ long term stable credit rating from S&P Global Ratings (formerly Standard and Poors). As can be seen from the above table Council easily meets the covenants outlined above. To ensure Council continues to meet these tests it is proposed that net debt remain below \$230 million for the period of the Long Term Plan.

### Interest rate risk

The Council enters into swap arrangements to mitigate against interest rate risk. However, because of Council's comparatively low level of current debt, it is unable to fix the interest rates until the forecast increased level of debt is actually required. In the event that interest rates moved resulting in a 1% movement above that provided for in the 10 Year Plan for Council only debt, this would provide the following increase in rates:

For the year ending	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1% interest rate movement (\$000)	927	1,434	1,838	2,524	2,744	2,987	3,281	3,452	3,484	3,460
Average cost per rateable property (\$)	35	54	70	96	104	113	124	131	132	131

### Funding depreciation

Council intends to continue funding depreciation in accordance with its Revenue and Financing Policy, which requires the funding of depreciation for all assets except for some Community Facilities (cemeteries, street trees, plots and berms, halls and reserves) and rivers, quarries, drains. Roading where depreciation is only half funded because of the NZTA financial assistance rate of 51%); and Southern Valleys Irrigation Scheme. The revenue collected to fund depreciation will initially be used to repay the debt and then to finance new and replacement assets. Any unused revenue from depreciation will be separately accounted for in the appropriate depreciation reserve.

### Operating surpluses

Council also generates operating surpluses each year. These accounting surpluses shown in the Forecast Statement of Comprehensive Revenue and Expense are driven primarily by:

- The need for revenue to meet the principal repayments relating to increasing levels of debt that have arisen as a result of Council's significant Capital Expenditure Programme; and
- That Generally Accepted Accounting Practice requires vested assets and capital contributions, including development contributions, and NZTA financial assistance for roading capital works to be treated as operating revenue. In reality these items are used to fund capital as compared to operating expenditure.

Any remaining surpluses will be used to defer the need for increasing debt. As a result of the significant recent expenditure on new assets, Council is currently in a period of low renewals. However, as these assets age, the need for renewals will increase, as shown in Council's Infrastructure Strategy, particularly in the years post this Plan. As a result, it is important for Council to retain a strong balance sheet and continue to fund depreciation.

### Equity investments and other interests

Council holds investments in:

- MDC Holdings Ltd and its subsidiaries - Port Marlborough NZ Ltd and Marlborough Airport Ltd.
- Marlborough Regional Forestry.
- Investment Bonds and Term Deposits.

### MDC Holdings Limited

MDC Holdings Ltd was established to:

- Separate Council's commercial trading activities from the other functions it carries out; and
- Bring Council's main trading activities into one structure.

For the most part MDC Holdings Ltd is charged with operating in a completely commercial manner. As such the only significant target is to generate a tax paid return on shareholder's funds of at least 7.0%. This target is reviewed annually when Council considers the MDC Holdings Ltd's Statement of Intent.

In addition to the commercial returns received, Council through MDC Holdings Ltd's subsidiaries (Port Marlborough NZ Ltd and Marlborough Airport Ltd) promotes Regional Economic Development as it provides means for the arrival and departure of visitors and the import and export of goods.

### *Marlborough Regional Forestry (MRF)*

The Council has an 88.5% ownership interest in MRF, with Kaikoura District Council owning the remaining 11.5%. MRF, a Joint Operating Committee of both Councils, has approximately 5,000 hectares of commercial forest with 4,321 hectares owned and the balance in predominantly leasehold title. This forest is managed on a rotation period of approximately 30 years with minor variations in this period based on market conditions. The forest had a value of \$21.1 million as at 30 June 2020. As a result of this holding Council is entitled to approximately 180,000 NZ Emission Trading Units (NZETUs) almost entirely from pre 1990 forest (current value circa \$6.5 million). The current intention is to replant the forest following harvest. Providing the replanting policy is maintained MRF should not be required to surrender NZETUs to meet the obligations imposed by the Emissions Trading Scheme on harvest. As a result, Council may elect to sell its Units to assist in meeting a future funding need.

Council is not expecting to generate cash proceeds from its investment in MRF for the majority of the period covered by the LTP as there will be insufficient mature trees available for harvest to generate a profit. Post 2031 significant returns should be generated depending on the internationally determined market price as the forest will be on its second rotation and not require expenditure on the development of roads and other infrastructure.

Council also has significantly smaller holdings of trees in its own right, but these are held predominantly for river protection and not for financial return.

### *Investment bonds and term deposits*

Council holds approximately \$12.0 million of investment bonds and term deposits as part of its Disaster Recovery Planning. It is expected that the rate of return received should be similar to the cost of Council's external debt.

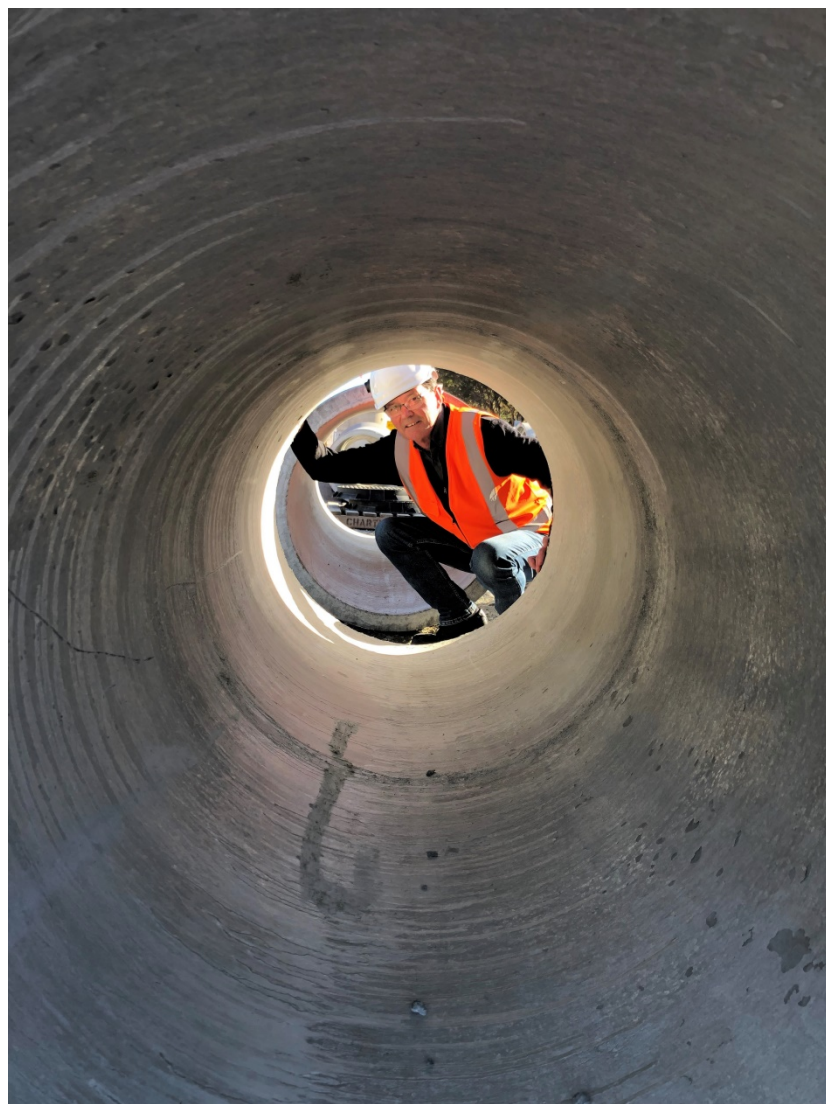
### **LGFA**

Council is a shareholder/member of the LGFA. The LGFA is a Council Controlled Trading Organisation (CCTO) set up by specific legislation. A key objective of the LGFA is to provide a funding vehicle that would enable local authorities to borrow at lower interest margins than would otherwise be available.

The LGFA is 'AA+' rated from S&P Global Ratings. This is the same as the New Zealand government's domestic rating.

All local authorities are able to borrow from the LGFA. As at 30 June 2020 the LGFA had advanced \$10.9 billion to local authorities, generating an estimated saving of approximately 0.2% in interest costs. The amount currently advanced is now in excess of \$12.0 billion.

The LGFA's policy is to pay a dividend that provides an annual rate of return to Shareholders equal to LGFA cost of funds plus 2.00% over the medium term. Noting however, that the payment of any dividend will be subject to the LGFA Board meeting its legal obligations and its views on appropriate capital structure. No dividend was paid on the 2020 result to strengthen the LGFA's capital structure.



# Infrastructure Strategy

## Executive summary

Planning for change is an essential business practice — to identify potential risks and to ensure we are well placed to make the most of our opportunities.

The purpose of this strategy is to consider how our infrastructure assets will continue to support our community and our economy over the next 30 years. Changes over this time period are likely to include:

- population growth slightly above the midpoint of Statistics NZ Regional population projections based on recent development;
- opportunities to use technology and increasing automation to be even smarter and more connected;
- making our infrastructure more resilient to climate changes and natural disasters.

We have almost completed our repair work following the 2016 Kaikoura Earthquake. We've taken this opportunity to build and upgrade this infrastructure to be more resilient to other natural hazards such as drought, sea level rise and intense rainfall events of the next 30 years and beyond. What we've learnt from the major earthquake has also been applied across all other capital and maintenance programmes.

Our overall approach to asset management is to maintain flexibility wherever possible, enabling us to take action when circumstances change, our knowledge improves and as technology develops.

The Council's major strategic priority for infrastructure is to:

- maintain our target levels of service and make improvements where required;
- extend our infrastructure as efficiently as possible to meet demand;
- maintain debt at a sustainable level.

## Infrastructure summary

### Key infrastructure challenges

This strategy identifies critical challenges for our roads, wastewater, water supply, stormwater, rivers and land drainage and community facility assets over the next 30 years, and the options for responding to them.

The key infrastructure challenges remain:

- to respond to the changes in population growth, distribution and age profile;
- meet changes to customers' expectations;
- meet changes to legislative requirements;
- the need to replace infrastructure which has reached the end of its useful life;
- the need to build resilience to natural hazards (including climate change and earthquakes).

### Implications for our assets

Significant asset management challenges for each asset type are summarised below.

#### Roads:

- Intensive heavy vehicle movements associated with forestry, quarrying and other operations are causing damage to under-strength pavements and structures; resulting in reduced asset lives and unacceptable safety and amenity issues.
- The increasing frequency and intensity of natural events is impacting on our vulnerable local road network, resulting in more frequent emergency events, network deterioration and subsequent network disruption.

- Increased traffic flows in urban and rural areas are resulting in barriers to walking and cycling (especially for the youngest and oldest members of the community), putting safety at risk and reducing transport options.
- We are facing a bow-wave of renewal need in asphalt surfacing and chip sealing. This will need to be addressed in order to avoid damage occurring to underlying pavement assets and to maintain ride quality.
- The compliance costs and resources required to mitigate harmful effects of transport on the environment are increasing, resulting in increased complexity and cost of transport activities.

#### Water

- Investment in new water treatment plants to comply with the NZ Drinking Water Standards and legislative changes as a result of the establishment of Taumata Arowai and the Water Services Bill.
- The need for water demand management (particularly in Picton) to ensure the water sources can meet future demand.
- Continued development of a targeted and efficient renewal programme for up to \$33.3M of water network over the next 30 years.

#### Wastewater:

- Meet increasing national standards and cultural sensitivities of effluent discharges to the environment.
- Anticipated growth in wastewater flows particularly industrial effluents from the wine industry
- Continued development of a targeted and efficient renewals programme for up to \$52.9m of wastewater network over the next 30 years.
- Continuing to reduce the vulnerability of some older wastewater pipes to ground movement during an earthquake.
- Increasing likelihood of infiltration of stormwater into the wastewater network as a result of ageing pipe network and climate change.

### *Stormwater:*

- The effects of urban growth and climate change on stormwater volumes.
- The need to improve the quality of stormwater discharges.
- Continued development of a targeted and efficient renewals programme for up to \$9.2m of stormwater network over the next 30 years.

### *Rivers and land drainage:*

- The need to meet levels of service in areas where land use has been changed and development is occurring.
- The impacts of climate change on coastal storm waves, sea level rise and flood flows on the effectiveness of the existing land drainage system.
- Managing gravel extraction to ensure sustainability of the resource and good river management.

### *Community Facilities:*

- Can adapt to meet needs that inevitably change over time.
- Facilities meet an evidenced and identified need within the community.
- Facilities should be developed to maximise usage of assets by many groups to ensure sustainability.

## **Preferred options for responding to these challenges**

The Council's preferred options for address the challenges are summarised below.

### *Legislation*

Changes in legislation particularly affect our water-related assets. We intend to complete existing water treatment plant upgrades for Renwick and Havelock and install treatment to Wairau Valley and Riverlands and

point-of-entry treatment devices for each household in Awatere Rural to meet the anticipated Water Services Bill and regulatory requirements of the newly formed Taumata Arowai.

National guidance on environmental standards will continue to be provided through the National Policy Statements. In particular the National Policy Statement for Freshwater Management, National Coastal Policy Statement and the National Policy Statement on Urban Development Capacity. Local implementation of the policies will be through the Marlborough Environment Plan.

Improving the quality and the quantities of water used and discharged back into the natural environment will require ongoing investment in our wastewater and stormwater assets. Actions include progressive implementation of the Blenheim Stormwater Strategy and its extension to other urban areas in the region.

The upgrade of the Blenheim Wastewater Treatment Plant to meet increasing volumes of wastewater particularly from the wine industry; increasingly stringent standards for effluent discharge and to meet the cultural requirements to avoid or restrict the volume of waste returned to the aquatic environment across all Wastewater Treatment Plants.

To deploy water demand management tools to promote more efficient water supply, reduce leakage and ensure water resources are sustained for future generations.

### *Renewals*

For all types of assets, the preferred option is to implement a proactive, planned renewals programme and invest in more condition assessment technology, field data collection and data management. This will enable informed decision making on the most cost effective timing of renewals. Enhanced condition assessments will be particularly valuable for our underground assets.



### *Resilience to climate change and natural hazards*

Ongoing investment in our resilience plan will ensure roads are reopened as soon as possible after a major natural event or other disruption.

The Council will soon begin a review the core Wairau River Floodway Management Plan. The review will examine the current level of service, customers' expectations and land use changes. It will also model flood flows under different conditions so that the range of effects that may result from climate change and sea-level rise can be more accurately predicted. Minor upgrades will be sufficient to preserve existing levels of service to about 2050 but after that time other options, including accepting increased flood risk or a managed retreat from some low-lying areas, may need to be considered.

Building infrastructure to the latest standards and with the most suitable materials increases resilience to flood events, earthquakes and changes in the climate. We are also prioritising the replacement of pipework and other assets made of older materials that are susceptible to natural hazards or have deteriorated more quickly than anticipated.

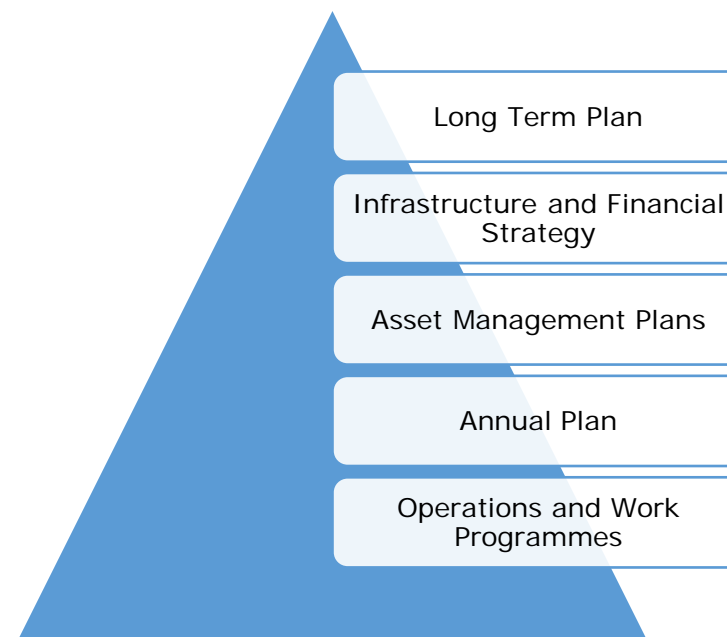
Our financial planning is another way we will ensure we can recover as quickly as possible from emergency events. Ensuring we have reserves, flexible capital programmes and insurance to meet the expected losses.

### *Strategic Planning*

There are a number of documents that make up the Asset Management System which enables the successful delivery of this strategy.

### *Engagement and Significance Policy*

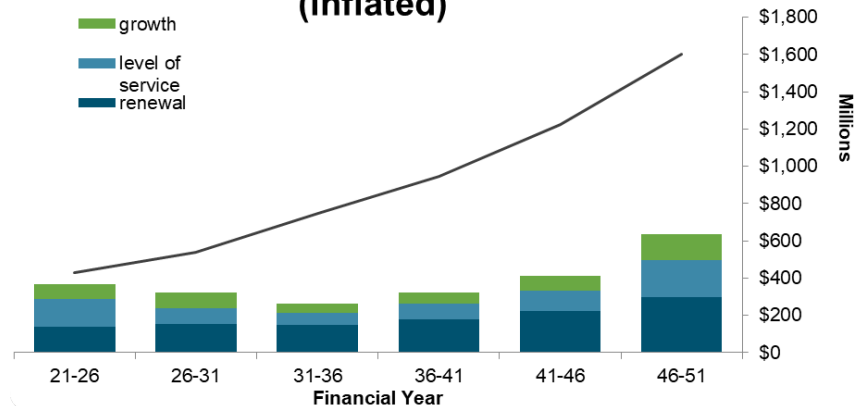
The following diagram demonstrates the hierarchy of this documentation:



### *Financial implications*

This graph provides an overall picture of the proposed capital and operating expenditure for our infrastructure over the next 30 years.

## Infrastructure Spending 2021-2051 (inflated)



## Introduction

### Why infrastructure matters

We often take for granted the infrastructure we rely on for the very basics of everyday life — clean water from the tap, a readily available flushing toilet and a safe drive to work or school. We tend not to think about how infrastructure works unless something goes wrong — roads are closed through land slips, homes or businesses are flooded, or there is a public health scare from contaminated water. That's when we realise how essential infrastructure is to all aspects of our lives.

This strategy covers the infrastructure owned and operated by the Council that delivers the core services — roads, wastewater, water supply, rivers and land drainage, and urban stormwater drainage. Community facilities have also been included as they are important part of the fabric of the community

An infrastructure strategy needs to answer three basic questions:

1. What are the significant infrastructure challenges over the next 30 years?
2. What are the main options for resolving those challenges and which of these is Marlborough District Council's preferred option?
3. What will it cost, and what does that mean for rates and debt?

In order to fully recognise the challenges faced by the region it is necessary to describe what Marlborough will look like in 30 years' time; consider the aspirations of the community and what we need to do differently to ensure infrastructure will still be meeting the needs of the people who will live here in 2051 and beyond.

We know the size and composition of the New Zealand population will be quite different. Climate change is almost certain to affect our daily lives. The massive advances of computer technology and the automation will continue to change the way we work and live.

These questions will be answered in the three parts of this strategy as outlined below.

### *Part One – context, opportunities and key challenges*

In this section Marlborough's unique combination of people, economy and environment are examined. The region is a wonderful place to live and work. The Council aims to enhance and develop the potential of the region to ensure the community is prosperous, healthy and educated; the lifestyle is attractive; the natural environment is protected and enriched and society is resilient to the inevitable challenges of the future. However we must consider recent changes to lifestyle, technology and the environment and identify trends that can be projected forward to try to understand what the region will look like in 30 years' time.

The economic environment will change as businesses prosper or decline. New employment opportunities will be created and different work patterns will emerge. Workers and their families will move in and out of the region in response to the opportunities. There will be many

more elderly people who may, or may not, have retired from the workforce.

Both the ethnic composition and wealth distribution throughout the population will be different

Lifestyles will change as computer based technology matures. Automated vehicles, Artificial Intelligence, 3D printers and robotics manufacture, and remote control through the 'internet of things' will almost certainly become commonplace.

Climate change will affect weather patterns, which will alter cultivation practices and the associated industries, building design, urban planning and many other aspects of daily life.

The fundamental Council infrastructure required to support the community — road transport, land drainage and water and wastewater services will need to adapt to the changing environment. In some cases the infrastructure will evolve and adapt in response to the changes but often it will need to be planned and implemented in advance to keep the community safe and facilitate the new developments.

Over the next 30 years technology will provide new opportunities that have strong potential to positively affect the management of infrastructure.

Part One concludes with an outline of the key challenges facing our region's infrastructure, including:

- the need to replace infrastructure which has reached the end of its useful life;
- changes to legislative requirements;
- the response to climate change predictions;
- preparation for a major earthquake.

## *Part Two — Specific challenges, options and preferred solutions for each of our infrastructure assets*

These chapters provide a more comprehensive summary of the significant asset management challenges for each asset type, the main options Council has to address these, and the implications of those options. Where possible, a preferred option is indicated.

The anticipated capital investment and the ongoing costs of operating infrastructure has been estimated. Financial information is provided in detail for each of the first ten years, and then in five year blocks after that. These forecasts also include the expected impact of price changes for projects over time expressed at current prices and adjusted for price inflation.

## *Part Three — Financial summary*

This section takes the financial information from Part Two and combines it to provide an overall picture of how much money needs to be invested over the next 30 years. A timeline for that spending is included.

Infrastructure is the biggest proportion of Council spending (61%) and this strategy informs, and is closely aligned with, Marlborough's Financial Strategy 2021-2031. This Infrastructure Strategy will also inform our long term plans, asset management plans and annual plans.

## **Part One — Context, Opportunities and Strategic Challenges**

### **Context and Opportunities – what sets our region apart**

Our vision is that over the next 30 years Marlborough will become a globally-connected district; known for progressive, high-value enterprise and economic efficiency. Residents will enjoy an enviable lifestyle and natural environment. The region will achieve a world-wide reputation as a visitor destination. Marlborough will be 'smart and connected'.

Infrastructure has a key role to play in supporting this vision — including an abundant supply of drinking water direct from the tap; a clean, safe

and sanitary environment; and the connectivity to safely link the region's communities together and to the outside world.

Marlborough is regularly recorded as one of the sunniest places in New Zealand. The good weather combined with the beautiful Marlborough Sounds, the Wairau and Awatere Valleys, a gateway to the Nelson Lakes National Park and the welcome awaiting at the numerous winery cellar doors makes the region a very popular destination for both national and international tourists. Tourist numbers have been increasing rapidly since 2000 and cruise ships regularly visit Picton with more than 5000 passengers on-board up until March 2020 when the COVID-19 Pandemic put New Zealand in to Alert Level Four. As international tourism is put on hold through border restrictions, Marlborough's tourism, as with the rest of the country, will be negatively affected. As the full impact of the COVID-19 pandemic is currently unknown, a The Economic Action Marlborough (TEAM) Group has been established to understand the effects and support businesses across the region.

The Marlborough economy has a number of significant industries — wine production, farming, forestry and aquaculture — and a booming tourism sector. The GDP generated by these activities in 2016 is shown below.

In March 2017 the New Zealand Transport Agency (NZTA) published its Long Term Strategic View. Their projections for the South Island were that the current economic drivers will remain consistent, with a continued emphasis on primary production. However regionally wine production and tourism are forecast to be the key growth area.

The Government has set a target of tripling the country's food and beverage exports over the next 15 years. This growth will be partially achieved by more land being converted to productive land, more efficient production and the introduction of high yielding products. The Marlborough wine industry is predicting a 29% increase in land area under grape cultivation by 2019/20.

Longer term, economic growth will be reliant on adding value to the raw primary products through manufacturing processes. In this respect the

wine industry is well ahead - turning their raw material into a high value product. Marlborough wine is marketed as a high quality product and has achieved a premium status in international marketplaces.

The gross domestic profit in Marlborough in 2020 is represented by the following;

There are opportunities for aquaculture to increase the value of fish and seafood. The pharmaceutical and nutraceutical industries are also finding new markets for seafood-based products.

The timber industry has the opportunity to manufacture boards, milled timber, joinery and other timber products to lift the value of the logs that are currently exported.

Marlborough has a well-established engineering industry and is a national centre for aircraft maintenance. The wine industry has attracted stainless steel fabrication, irrigation and wastewater processing and other production engineering.

New industries using computers and the internet do not need to be located in close proximity to traditional markets in busy cities. Employees in these fields are choosing to work remotely and some are relocating to Marlborough to take advantage of the enviable lifestyle.

### *Viticulture*

New Zealand's wine exports continue to grow strongly, and appear on track to exceed the \$2 billion mark within the next couple of years. This is significant for Marlborough as the region produces 80% of the New Zealand total output. Vineyards now occupy 24,020 hectares of land in the region and in 2016 produced 323,290 tonnes of grapes.

The statistics for 2020 show 1,496 people are employed in grape growing and another 1,271 in wine making. The industry continues to forecast an increase in future production which will create jobs for an even larger workforce.

There are a number of related infrastructure implications:

- managing the additional liquid trade waste from the wineries;
- increased stormwater runoff from changing land use to vineyards;
- managing freshwater resources as demand increases for process and drinking water;
- increased demands for flood protection as the value of the crop increases;
- road traffic increases to transport both product and workers related to the industry.

The viticulture industry employs a large and growing number of seasonal workers. Specialist residential accommodation is being provided and much of it is sited on the outskirts of Blenheim. This creates new demand at the edges of the water and wastewater distribution networks, which was not anticipated at the time the services were designed and installed.

### Tourism

International and domestic visitors are a vital element of our economy due to the demand they create for local goods and services — accommodation, food and beverages, retail and transport. This sector was been expanding rapidly as Marlborough's unique climate and wonderful environment attract visitors from around the world. The full impact of the COVID-19 Pandemic on tourism in Marlborough is unknown, but is being supported by TEAM.

The graph below shows the tourism share of gross domestic profit that Marlborough receives compared to New Zealand as a whole.



### Aquaculture, seafood and fishing

Aquaculture, seafood and fishing make a major contribution to the local economy. Marlborough salmon and green lipped mussels are a luxury product valued around the world. It is estimated that around 504 people work specifically in seafood processing, and another 1833 work in other agriculture and fishing support services.

There may be some potential to increase the productivity of aquaculture in the Marlborough Sounds but there is growing concern over the negative environmental consequences of intensive fish farming. Further expansion is likely to meet with some resistance.

There is growing recognition of the health benefits of fish oil and fish-based products. There may be more opportunity to add value and open new markets through developing pharmaceutical and nutraceutical products than on increasing sales of the traditional products. However, seafood processing typically uses large volumes of clean water and produces equivalent volumes of liquid waste. Meeting the additional

demand for water supply and waste water treatment may become a challenge.

### *Sheep and beef farming*

Sheep and beef cattle farming continues to be a strong contributor to the regional economy, with an estimated 277 people working directly in stock farming. Many more workers are employed in the farm services sector, supplying everything from animal feed to tractor repairs to fencing services.

Remotely located farms rely on strong roads and bridges for access by heavy vehicles. Dairy farms are particularly reliant on constant road access to take the daily milk for processing.

### *Forestry*

Forestry directly contributes 6% to the local economy and harvesting is expected to increase in the future. Maintaining roads and bridges in remote forestry areas which are strong enough to take the weight of larger, heavier vehicles is an infrastructure challenge for Marlborough.

As more tourists travel into the remote areas, maintaining safety for all the road users requires more consideration. Heavy vehicles travelling on unsealed roads also create large dust clouds. These can become both a hazard and a nuisance to other road users, visitors and the growing numbers of residents living on lifestyle blocks.

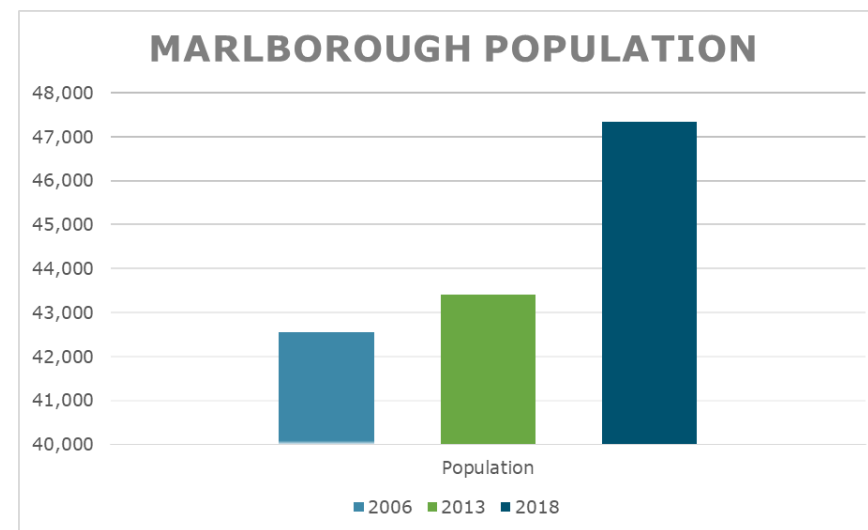
### *Population*

In preparing the Long Term Plan Council has assumed population growth will occur at slightly above the Department of Statistics medium population growth projections, supplemented by more recent economic forecasts and the actual growth that has occurred over recent years.

Many migrants are attracted to, and settle in, the larger cities. The elderly also tend to move to urban areas where social and medical services are more readily available. For both these reasons statisticians are predicting a general decline in rural provincial populations and growth in the major urban areas, especially Auckland.

As the sunniest area in New Zealand, our climate, beautiful environments and healthy economy will continue to attract people to our area. This will help to counterbalance the general trend for provincial New Zealand. Partly because of this uncertainty planners use the medium to high projection as a basis for planning future service provision in Marlborough. There are long lead-in times for major projects with public consultation, land purchase negotiations, resource consent approval and construction. Planning conservatively for medium/high growth also provides some future proofing for assets that may have a useful life in excess of 80 years.

Marlborough has had an increase in population by approximately 9% between the 2013 and 2018 Census. Graph 5.1 below shows the increase from 43,416 in 2013 to 47,340 in 2018. This population increase is in line with medium to high projections rates produced by Statistics NZ and is driven primarily through net migration into the region.

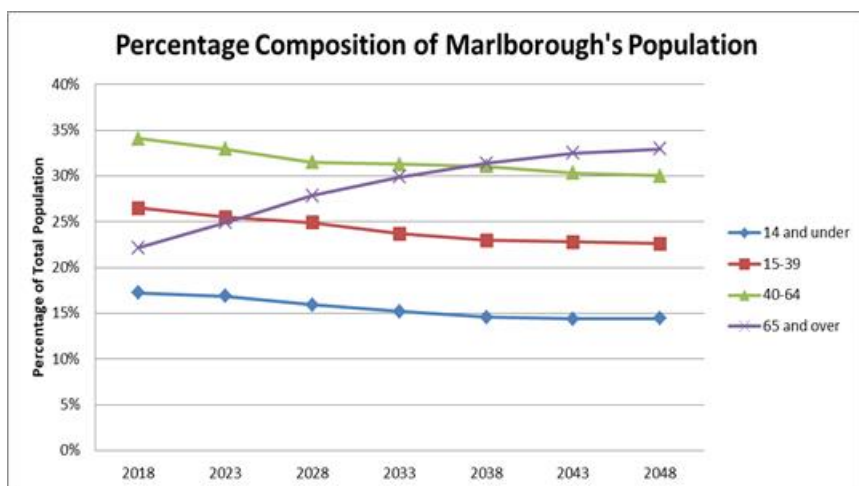


Graph 5.1 Marlborough Population 2006 – 2013 - 2018

The forecast population projections for Marlborough indicate some population growth over the next 20 years. The 2020 population estimates from Statistic New Zealand indicate the Marlborough population is still growing at a rate of over 1% per year and is now 50,200 (estimate as at June 30, 2020)<sup>14</sup>. More than 70% of this population live in Blenheim and approximately 16% in the Picton, Waikawa area.

Marlborough's population is ageing. The Marlborough population is expected to have a significantly larger number of residents aged 65 years and older with other age groups experiencing declines in population levels. This is similar to many parts of New Zealand (and the Western world).

Graph 5.2 highlights the population projections by age groups.



Graph 5.2 Population projections by age, 2018-2048

<sup>14</sup> [www.stats.govt.nz](http://www.stats.govt.nz) Estimated resident population at 30 June 2020

The increasing elderly population and fewer working people need to be taken into consideration in financial planning, particularly when setting rates.

The trend for growing urban centres and fewer people living in rural areas is expected to continue, as older people generally prefer to live closer to the services provided in larger centres. The provision of infrastructure in smaller settlements and the method of funding may need to be considered in the light of these projections.

Older people are also more likely to prefer smaller houses and sections near the urban centres. Providing for this market could lead to urban intensification through regeneration of the existing housing stock.

The current urban settlement pattern consists of an average of 10-11 properties per hectare. The Development Contribution Policy helps to encourage urban infill by offering reduced charges for the subdivision of small residential sections. Urban intensification would help to reduce further urban spread and subsequent extension to the linear infrastructure. Costs per connection would decrease and improve the affordability of these services.

According to historic Building Consent and Development Contribution information, growth is estimated to increase by 125 household equivalent units annually for the next ten years within Blenheim. This demand is expected to be much higher in the first few years, and drop off over time. Blenheim traditionally accounts for about 60% of all building consents for new dwellings, the remainder in the wider district.

### Technology

Technological developments have the potential to change many elements of infrastructure over the next 30 years, including:

- driverless cars, reducing the need for parking spaces in urban centres and improving road safety. This would help to reduce risks associated with drivers who are unfamiliar with our roads;

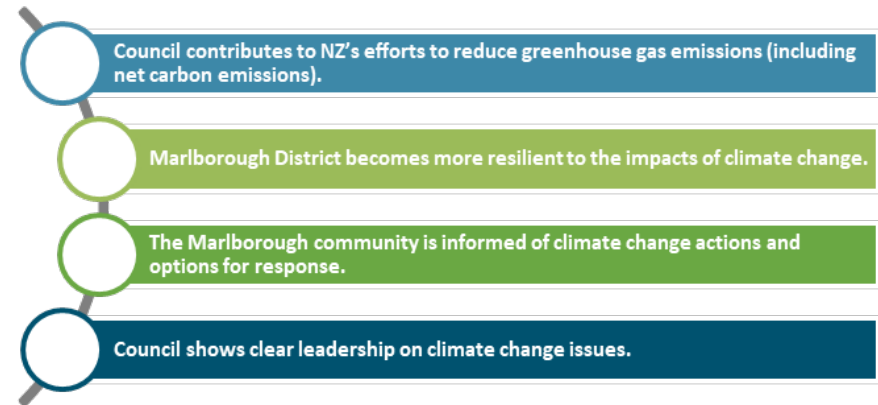
- car sharing of driverless electric cars is expected to be the norm in the US in 13 years. Private car ownership may become rare as driverless cars are shared in car pools, houses will not require garages and suburban streets will become single lane roads with passing spaces as computers control navigation and avoid other cars;
- micro-treatment and water recycling will become readily available;
- smart metering will enable people to use water and electricity more efficiently and suppliers can incentivise customers to reduce peaks in demand;
- infrastructure providers will have access to real time data to better understand their networks, including traffic flows and water use;
- 3-D printing will become commonplace changing retail and goods distribution industries;
- intelligent robotics will be used in underground inspections and works.

### Climate Change

The Climate is changing and the impact of this is constantly measured, monitored and assessed for the future impact that it will have on our infrastructure assets.

While the climate change predictions remain mostly unchanged from the 2018 LTP, our consideration and investigation in to the impact of these predictions has improved. A Climate Change Working Group has been established across the Council and a Climate Change Action Plan was adopted by Council in March 2020.

The Climate Change Action Plan has four main goals;



At the point of writing the LTP, a Carbon Emissions Inventory is underway to assess our current level of emissions, the resiliency of these methods to reduce emissions and identify opportunities for future reductions. NIWA have been commissioned to provide Climate Change Projections and Impacts for Marlborough so that all future planning can be based on the same climate change predictions.

Climate change is a long-term influence that has been incorporated in to the planning and design of long-life infrastructure. The effects and impacts that climate change poses across the Infrastructure Assets are highlighted within this strategy.

The full Climate Change Action Plan forms the appendices for the Asset Management Plans.

### COVID-19

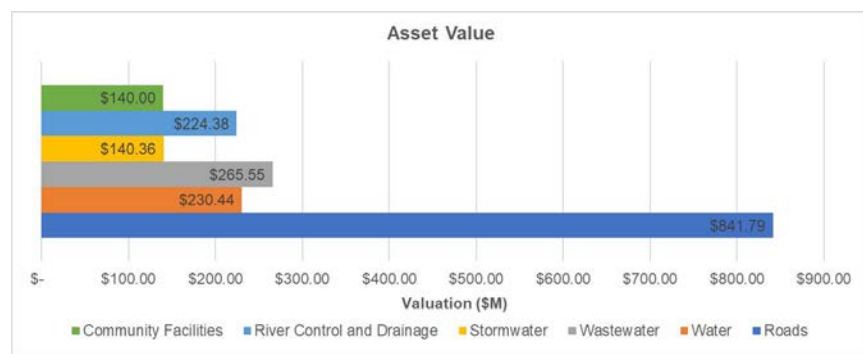
The development of this plan has occurred during the global COVID-19 pandemic. This has caused some alterations to the timing of various stages of the project process, however there has been no substantial impact on the overall project. It is acknowledged that the COVID-19 pandemic may cause delays or changes to some of the proposed recommendations within this report. It is still unclear what the longer term impacts of COVID-19 will be on infrastructure.



## Key infrastructure challenges

### 1. Infrastructure renewals

Marlborough District Council's water, wastewater, stormwater, roads, community facilities and flood protection assets have a combined asset value of around \$1,801.52 million. The value of each asset type is:



Many of these assets have long life expectancies, but ongoing investment is required to maintain and eventually replace them when they reach the end of their useful life.

Each year The Council collects the amount required to cover the full cost of both maintaining these assets and replacing them when they wear out (depreciate to the point of replacement). These costs are a big proportion (21%) of the rates collected each year.

Calculation of infrastructure depreciation is an accounting estimate for inclusion in the annual funding assessment. The rate of deterioration is a critical factor in the calculation but can be difficult to accurately predict. There are many influencing factors which often work in combination including: wear and tear, differential loads, the quality of workmanship during installation and maintenance, third party damage, weather and its effects on the networks, seismic activity, ground movement and technological change.

The buried pipe infrastructure and the sub-structure of roads present another challenge as they are not visible and it is therefore more difficult to assess their condition. Without reliable condition information it is a complex task to accurately estimate how long the asset will remain serviceable.

There is projected to be a large spike in water infrastructure renewal activity just beyond the 30 year planning horizon of this strategy (from 2048 –2057). This reflects the high level investment made around 50 years ago when the region was growing rapidly. It is desirable to spread the cost in order to remove the peaks and create a smoother spending profile. Considerable efforts are being made to determine the accuracy of this projection so the renewal programme can be managed to meet this objective

Similarly, there are many small bridges in Marlborough (often constructed of timber in rural areas) that were built as the road network was consolidated after the Second World War. Many were designed for lighter traffic and reaching the end of their useful life. Speed and weight restrictions have been implemented to help extend their lives but a planned renewal programme is required.

It should also be noted that as more infrastructure is added to meet the demands of growth and higher levels of service, the cost of funding depreciation in future will increase and be reflected in ongoing rates collection. The costs of operations, maintenance, finance and insurance also increase.

### 2. Legislative Requirements

The Council's management of infrastructure needs to comply with national legislation, policies and standards. The following documents set the direction for delivering quality services.

- The Local Government Act 2002 requires the adoption of a 30 year infrastructure strategy every three years.
- The Resource Management Act 1991 (RMA), National Policy Statement on Freshwater Management (NPSFM) and the New Zealand Coastal Policy Statement (NZCPS) include requirements to

sustainably manage water use and discharges to coastal and freshwater water.

- Taumata Arowai has been established as Crown Entity in March 2021 and will be responsible for the implementation of the Water Services Bill anticipated in July 2021. The Water Services Bill will replace the existing Drinking Water Standards of New Zealand (DWSNZ) and set the standards for supply and delivery of drinking water throughout New Zealand. Responsibility of this role will be removed from District Health Boards, where it currently sits.
- The Government Policy Statement on Land Transport (GPS) includes a hierarchy of roads in order to work towards national consistency for each road type throughout New Zealand.
- The Civil Defence Emergency Management Act 2002 (CDEM Act) requires lifelines utilities (which includes providers of roads, water supplies, stormwater and wastewater services) to ensure these services function to the fullest possible extent during and after an emergency (section 60).
- The Government is currently developing a National Policy Statement on Resilience, which is likely to have implications for future versions of the Council's financial and infrastructure strategies.

#### Legislative Requirement - Implications For Our Assets

##### Roads

- The GPS may influence levels of service targets for Marlborough Roads.

##### Water

- Significant investment is being invested to upgrade the supplies to Renwick, Awatere, Havelock, Riverlands and Wairau Valley to meet the current DWSNZ.
- Meeting likely increased standards in the supply and delivery of drinking water with the implementation of the Water Services Bill anticipated in July 2021, whilst currently planning to meet the DWSNZ across all supplies.

- The fluoridation of water supplies continues to be a political issue which may also result in additional costs to Council.
- New water quantity requirements in the NPSFM and the Marlborough Environment Plan will be reflected in future water permits for public water supplies. The Council will need to demonstrate efficient use of water when it applies for its next urban water supply resource consent for Blenheim, after the existing one expires in 2030.

##### Wastewater

- The NZCPS will again influence the outcome of the 2023 and 2024 consent applications for the Seddon and Havelock sewage treatment plants. The resource consent for the Blenheim Wastewater Treatment Plant is due for renewal in 2023. Capital upgrades to the plants are underway to meet the expected consent conditions.

##### Stormwater

- Consolidation and updating of the stormwater resource consents is a primary objective of the Blenheim Stormwater Strategy. The NPSFM and NZCPS requirements will be reflected in the resource consent conditions. Stormwater quality control measures are being installed on new sub-divisions and expenditure will be required to upgrade some existing discharges to freshwater and the coast. Stormwater Management Area Plans are being developed for each catchment, starting in Blenheim.

### 3. Climate Change

The current advice from the Ministry for Environment is outlined below.

*Temperature:* by 2040 temperatures are likely to be 0.7°C – 1.0°C warmer and by 2090 0.7°C – 3.0°C warmer compared to 1995 temperatures. The number of days when the temperature exceeds 25°C is increasing and the number of frosts are decreasing. By the end of the 21<sup>st</sup> century these very hot days could rise from 6 days to 38 days per year and frosts could decrease from 19 to 7 days per year respectively.

**Rainfall:** by 2090 summer rainfall is likely to be 9% higher. The incidence of extreme rainfall events and also droughts are both likely to increase. However, there will be some regional variation. Precipitation in the winter is likely to fall as rain rather than snow. This may increase river flows during the winter with subsequent potential for flooding. Less snow melt could decrease river flows during spring, reducing the water available for abstraction.

**Wind:** by 2090 the number of extremely windy days is expected to have increased by 2-10%. These increases will be seen as westerly's in the winter and north easterly's in the summer.

**Sea level rise:** relative to the 1980-1999 average mean sea level, it is anticipated by 2048 there will be a rise of 300mm and by 2100, a rise of 800mm. Average sea level rose by 1.7mm per year over the last century. This rate has increased over the last 20 years and is predicted to continue to rise. The effects are exacerbated by changing tide patterns and an increase in storm surges.

#### Climate Change - Implications For Our Assets

The effects and impacts of climate change on our infrastructure assets are summarised below.

EFFECTS/IMPACTS	Temperature	Rainfall	Wind	Sea Level Rise
Roads	Longer sealing season	Closures and reduced reliability Increased maintenance costs Upgrading of road drainage and bridges	Closures and reduced reliability Increased maintenance costs	Storm surge damage at risk roads Low level roads unusable
Water	Shift in demand profiles	Shift in demand profiles Increased pressure on water treatment and aquifers	Shift in demand profiles	Salt water intrusion of groundwater bores
Wastewater	Change to treatment process	Increase likelihood of wastewater overflows through inflow and infiltration in to the network	Evaluation of effect on oxidation ponds in treatment and health and safety	Blenheim and Havelock Treatment Plants seriously impacted Inability to irrigate using wastewater
Stormwater		More pressure on flood protection and overland flow paths		Change in flow characteristics
River and Land Drainage	Less snow melt reducing river flows in spring reducing water available for extraction	Higher river flows increasing likelihood of flooding events		Resistance to rivers and drains discharging in tidal zones

### Roads

- Some road drainage may need to be upgraded.
- Bridges and culverts will need to be designed to cope with the increased flows.
- Slips are likely to become more frequent after heavy rain. Additional resources will be needed for road clearance and the securing of unstable hillsides. We will also need to proactively regrade and secure steep roadsides.

### Water Supply

- Increased frequency and duration of droughts will put strain on the water sources particularly where aquifers are shared between public water supply and production water.
- Increased droughts will place additional demands on water treatment and reticulation plant.

### Wastewater

- Marlborough's wastewater treatment plants can continue to operate with a 300mm increase in sea level rise, as is predicted to occur over the next 30 years. However, the existing wastewater treatment plants will be seriously impacted by 700mm of sea level rise, which is predicted to occur by 2100.
- Rising water tables will affect the Council's ability to continue irrigating land with treated wastewater from the Blenheim Wastewater Plant (when the land is too wet and/or the water table is high.)
- More frequent and intense storms will increase the risk of sewer overflows in urban areas via stormwater inflow and infiltration into the wastewater reticulation.

### Stormwater

- More frequent high intensity rainfall events will place greater demands on the stormwater system. Urban drainage reticulation will be tested, detention areas will temporarily fill with storm water and overland flow paths will need to be utilised.

### Rivers and Flood Protection

- Council may need to dig larger drainage channels, increase the height of existing stop banks and provide added stop bank protection to cope with increased rainfall intensity.

As the sea level rises, pumped outfalls are also likely to be required to assist with drainage of flat, low-lying land on the Lower Wairau plain where we can no longer rely on gravity to achieve discharges to the sea.

### 4. Earthquakes

A significant earthquake in the next 50 years (on the Alpine Fault) has a 50% likelihood of occurring, and an 85% likelihood of occurring over the next 100 years. This event could be 10 times more powerful than the November 2016 event, with shaking lasting up to six minutes (compared to up to two minutes during the Kaikoura earthquake).

To prepare for such a large earthquake, new infrastructure is being built to high standards, and emergency power generation is provided for new plants. The Council has also assessed the impact of a significant earthquake on roads, riverbanks and stopbanks.

Fault lines will need to be avoided when developing land and installing infrastructure. Slumping and liquefaction are also becoming more significant considerations when planning future urban development.

In 2018, Council reviewed its assumptions and expectations regarding the Maximum Probable Loss to infrastructural assets as a result of a large earthquake. Consultants were employed to undertake a study of probable losses to the three water services (water supply, wastewater and stormwater) and river defence assets due to an earthquake with a 1:500 and a 1:1000 year return period. An estimate of damage to roading, insurance excesses and losses of rates revenue was also considered. An event of this magnitude was estimated to result in a \$485 million loss to the Council in 2018.

Currently central government meets 60% (above the excess) of infrastructure damage costs incurred from natural disasters. Local government is obliged to show prudent arrangements to meet the

remaining 40% of costs. However, central government has indicated it is reluctant to continue this ongoing liability and may wish to pass greater responsibility to local authorities in future. The costs of additional risk mitigation could be considerable. The Council maintains a \$14 million Disaster Recovery Reserve and continues to be regularly analysed to ensure it is sufficient to meet any potential future events in combination with insurance coverage.

## Earthquake - Implications For Our Assets

### Roads

- Many roads particularly in the Sounds and rural areas are vulnerable to landslips.
- Major bridges have been surveyed and strengthened to resist earthquakes but may still be vulnerable to very large events.

### Water

- The water treatment plants for Blenheim and Picton have been upgraded in the last ten years and are built to the latest standards for earthquake resistance. Emergency power generation is included. The treatment plants at Renwick and Havelock are less resistant until upgrade works re completed.
- New reservoirs have been built to be earthquake resistant and older reservoirs have been strengthened. Some damage from a very large event must be anticipated.
- There is 138kms of asbestos cement pipe with an estimated replacement cost of around \$26 million with a life expectancy of less than 40 years.

### Wastewater

- The wastewater treatment plants at Blenheim and Havelock are located on the coastal plain. Tsunami inundation is a risk. As is ground movement and liquefaction on river/coastal soils.
- Many pump stations have been upgraded to resist the effects of ground shaking but significant damage could be expected from a very large event.

- Modern plastic pipe materials are more resistant to damage from ground shaking. Around 65kms of pipe (valued at approx. \$64 million) is over 50 years old.

### Stormwater

- Around 19kms of stormwater reticulation with a combined replacement value of approximately \$10 million is of the older 'brittle' materials asbestos cement and earthenware.
- Ground movement may affect gravity pipelines laid to shallow gradients on the Wairau Plain.

### Rivers and Flood Protection

- Many of the older stop-banks have not been constructed to modern engineering standards.
- The 2016 earthquake caused \$2.4 million damage to existing stop banks and river edge protection through lateral spread and slumping

### Community Facilities

- Many of the local community halls are not constructed to modern earthquake resistance standards.
- Major memorials have been strengthened but some damage can be anticipated from a large event.

## 5. *Spending and Funding Balance*

One of the key infrastructure challenges is to address the tensions between spending and funding of core infrastructure.

The strategy is based on the following general principles:

- growth driven capital expenditure is funded by Development Contributions.
- capital expenditure to increase levels of service, e.g. improve quality of drinking water supply, is funded by borrowing.
- renewals capital expenditure is funded from revenue - rates and charges - set to recover depreciation expense, and accumulated

until spent. This funding source emphasises the importance to Council of continually fully funding depreciation on infrastructural assets.

The detail of financial management is described in the Financial Strategy. The Infrastructure Strategy and Financial Strategy align with each other.

The timing of expenditure with funding availability is an important outcome of the planning process. It is critical to ensure that adequate funding is available to prevent delays in programmed works but avoid excess cash that will incur unnecessary funding costs. An analysis of Council's capital spending has shown that over the period 2015-2020, \$34.2M has been spent per annum. The strategy identifies major capital projects. The delivery of many of these projects will depend on a number of protracted processes – public consultation and agreement, resource consent approval, land-purchase and design & construction resource availability. In consideration of these constraints the Council is planning to provide capital funding of no more than \$71M per annum for the first three years of the LTP.

## Part Two – Asset-Specific Chapters

### Roads

For Marlborough to achieve its vision for the future, the infrastructure must be sufficient and functioning; achievable and sustainable with the resources available.

#### *Roading Goals*

- The roading infrastructure will reliably, efficiently and safely connect communities within Marlborough; connect Marlborough to wider New Zealand and provide safe transit for visitors passing through the region.
- The road transport network will support economic growth through better access on key routes.
- Increase the resilience of the roading infrastructure to natural hazards to provide a safe and reliable transport system.
- Maintain the unsealed roads to keep the network functions and fit for purpose throughout its life cycle.

#### *Introduction*

The Council is responsible for the management of a transportation network that comprises 1549km of roads (909km sealed and 640km unsealed).

This is Council's largest infrastructure asset. The affordability of **renewals** is particularly an issue for roads, which have the highest replacement value (\$827 million). Approximately \$13.4 million has to be spent each year to address the effects of deterioration of the roads, bridges and associated assets. To achieve this, renewals are phased to ensure all areas are addressed on a cyclical basis based on the level of traffic they receive and technical review by engineering staff.

The Marlborough roads traverse some difficult terrain and this has influenced the design and character of the transport system. Of the 1549km, only 184km of that is urban, the rest is rural. Roads tend to be long and narrow, with few alternate options in many cases. Our roads

are vulnerable to flooding and slips, as well as tidal inundation in the Sounds. As people and businesses become increasingly reliant on reliable transport links, building resilience against the uncertainties of **climate change** and large **earthquakes** will be a key challenge for this asset.

In future years the rural population and smaller townships are projected to decline. Changing **demographics** mean there will be a larger number of older people within the population which will increase the demand for better access and dedicated routes for mobility scooters and spaces to park them. Nuisance from dust on unsealed rural roads, and waterway contamination at the numerous remaining fords, are emerging challenges, along with the need for continuous improvement in road safety. The **level of service** for the roads and bridges will be adjusted to meet the new realities of road users.

There is an increasing demand for freight haulage. The success of Marlborough wines, timber production and the region's growing reputation as a tourist destination are all generating **growth** for road services.

While tourists and freight operators share the same network, they travel in different ways. Freight trips are often longer, time critical journeys while tourist journeys can be less time constrained with multiple stops. Both journey types need to be adequately provided for.

## 1. *Specific challenges*

### 1.1. *Intensive Heavy Vehicle Movements*

Intensive heavy vehicle movements associated with forestry, quarrying and other operations are causing damage to under-strength pavements and structures; resulting in reduced asset lives and unacceptable safety and amenity issues. Where a road will experience sustained heavy vehicle movements over an extended period then upgrades (widening and strengthening) can be justified. Roads have been identified for upgrade to meet projected demands.

Coordinating work programmes with intensive activities as well as improving drainage maintenance and having robust seal designs are a few of the options to deal with this challenge.

### 1.2. *Natural Events*

The increasing frequency and intensity of natural events is impacting on our vulnerable local road network, resulting in more frequent emergency events, network deterioration and subsequent network disruption.

In cases where it is likely to be uneconomic to try and predict and implement resilience improvements; added resilience/capacity is being built in to emergency response solutions and asset replacement programmes.

### 1.3. *Increasing Traffic Flows*

Increased traffic flows in urban and rural areas are resulting in barriers to walking and cycling (especially for the youngest and oldest members of the community), putting safety at risk and reducing transport options.

Crash analysis revealed that Blenheim has an urban cycle safety issue compared with other areas of New Zealand. Infrastructure for walking and cycling will continue to be provided and appropriate interventions will be developed and installed where required using the Low Cost Low Risk Funding.

### 1.4. *Renewal Need*

We are facing a bow-wave of renewal need in asphalt surfacing and chip sealing. This will need to be addressed in order to avoid damage occurring to underlying pavement assets and to maintain ride quality. In terms of structures, as were addressed in the previous plan, the High Street Bridge will be replaced within the next seven years.

A Forward Works Programme with a particular view to seek alternative treatment options will be developed. Alternative and cheaper treatment options give opportunities for earlier intervention methods, which in the right situation, could stretch the life of the assets and also allows the

opportunity to take advantage of times of low oil prices in order to increase seal lengths rather than reduce budgets.

complexity and cost of transport activities. Recruitment of additional staff is being undertaken in order to support this aspect.

### 1.5. Compliance Costs

The compliance costs and resources required to mitigate harmful effects of transport on the environment are increasing, resulting in increased

The Governments new waiver of resource consent requirements for minor works e.g. culvert replacements, also offers an opportunity to reduce costs and also delivery time.

Projects	LOS %	Growth %	Renewal %	2021/ 2022	2022/ 2023	2023/ 2024	2024/ 2025	2025/ 2026	2026/ 2027	2027/ 2028	2028/ 2029	2029/ 2030	2030/ 2031
Bridges	0.00	100.00	0.00							\$6.5M			
Cycle Facilities	0.00	0.00	100.00						\$0.5M				
Cycle Facilities	100.00	0.00	0.00			\$1.5M							
Cycle Facilities	100.00	0.00	0.00						\$1.3M				
External Vested Assets	0.00	100.00	0.00						\$6.2M				
Footpaths - concrete	50.00	50.00	0.00						\$0.9M				
Footpaths - sealed	50.00	0.00	50.00		\$1.0M								
Kerb and Channel	50.00	50.00	0.00						\$0.9M				
Other buildings	100.00	0.00	0.00						\$1.9M				
Other buildings	0.00	0.00	100.00	\$0.6M									
Other buildings	100.00	0.00	0.00						\$1.9M				
Other buildings	0.00	0.00	100.00	\$0.3M									
Paved / Cobbled areas	100.00	0.00	0.00						\$7.5M				
Paved / Cobbled areas	0.00	0.00	100.00	\$0.6M									
Renewals Bridges	0.00	0.00	100.00					\$7.0M					
Renewals Bridges	0.00	0.00	100.00							\$4.1M			
Renewals Drainage	0.00	0.00	100.00						\$7.5M				
Renewals Footpaths (sealed)	0.00	0.00	100.00						\$4.5M				
Renewals Kerb and Channel	0.00	0.00	100.00						\$0.5M				
Renewals Pavement rehabilitation	0.00	0.00	100.00						\$13.3M				
Renewals Sealed Road Surfacing	0.00	0.00	100.00						\$44.2M				
Renewals Sealed Road Surfacing	0.00	0.00	100.00	\$0.7M									
Renewals Street Furniture	0.00	0.00	100.00						\$0.4M				
Renewals Structures component replacement	0.00	0.00	100.00						\$3.7M				



Projects	LOS %	Growth %	Renewal %	2021/ 2022	2022/ 2023	2023/ 2024	2024/ 2025	2025/ 2026	2026/ 2027	2027/ 2028	2028/ 2029	2029/ 2030	2030/ 2031	
Renewals Traffic Services	0.00	0.00	100.00	\$2.7M										
Renewals Unsealed road metaling	0.00	0.00	100.00	\$14.7M										
Renewals Vehicle crossings	0.00	0.00	100.00	\$0.8M										
Renewals: Minor improvements	0.00	0.00	100.00	\$15.0M										
Renewals: Minor improvements	0.00	0.00	100.00	\$0.7M										
Renewals: Minor improvements	0.00	0.00	100.00	\$0.3M										
Renewals: Minor improvements	100.00	0.00	0.00	\$0.2M										
Renewals: Minor improvements	0.00	0.00	100.00	\$0.7M										
Sealed pavement	0.00	0.00	100.00	\$0.1M										
Sealed pavement	100.00	0.00	0.00	\$1.0M										
Sealed pavement	0.00	100.00	0.00	\$1.5M										
Signs	50.00	50.00	0.00	\$0.5M										
Signs	0.00	0.00	100.00	\$0.2M										
Street furniture	100.00	0.00	0.00	\$0.0M										
Streetlighting	0.00	50.00	50.00	\$0.4M										
Traffic Islands / Services	0.00	100.00	0.00	\$0.4M										
Vehicle crossings	50.00	50.00	0.00	\$0.3M										
Wharves	0.00	0.00	100.00	\$0.8M										
Wharves	0.00	100.00	0.00	\$0.3M										
Pipelines	0.00	100.00	0.00	\$0.4M										
Pipelines	0.00	100.00	0.00	\$0.5M								\$0.1M		
Pipelines	0.00	100.00	0.00	\$0.1M										
Sealed pavement	0.00	100.00	0.00	\$0.6M										
Pipelines	0.00	0.00	100.00	\$0.6M										
Sealed pavement	0.00	0.00	100.00	\$0.4M										

## Water

For Marlborough to achieve its vision for the future, the infrastructure must be sufficient and functioning; achievable and sustainable with the resources available

### Water Supply Goals

- The seven water supply schemes will comply with the quality standards of the Drinking Water Standards New Zealand.
- Flow and pressure of water supplied will meet the reasonable expectations of the community and be sufficient for fire-fighting purposes (except Awatere and Wairau Valley.)
- As far as possible economic development will not be constrained from inadequate or unsuitable drinking water supply.
- The water supply will meet the statutory obligation under the Civil Defence Emergency Management Act to function as fully possible after an emergency event.

### Introduction

The Council owns and operates seven water supply schemes — in Blenheim, Picton, Havelock, Renwick, Riverlands, Wairau Valley and Awatere (Awatere is further divided into the Seddon and Awatere Rural supplies.) Around 82% of Marlborough residents have access to water through these schemes.

All of the key themes identified in Part One of this strategy are reflected in the water supply activity. **Growth** in demand for water, both for residential uses and for production (irrigation & processing water), has been steadily increasing. In particular, a predicted 25% increase in wine production will increase demand for water.

There is a need to manage future growth in demand, particularly in relation to uncertainty about future **demographics** and **climate change**, to ensure the water sources remain at sustainable levels for all users. **Levels of service** have been set to ensure tap water from all Council supplies is safe for drinking. Building and running the treatment plants present **affordability** issues for small communities.

Much of the water reticulation infrastructure was installed during the ‘baby boom’ growth periods in the middle of the 20<sup>th</sup> century. These pipes will reach the end of their useful life over the next 30 years. The pipe materials used at that time are less resistant to ground shaking during earthquakes than the materials we have been using more recently. Continuing to manage an efficient and effective **renewals** programme that improves the **resilience** of the networks will be a key challenge.

The following table provides a summary of the Council’s water supply systems.

Location/Asset Type	Mains (km)	Service Lines (km)	Meters	Back flow Preventor	Bores	Intake	Treatment Plants	Distribution Pump Stations	Booster Pump Stations
<b>Awatere</b>	147.7	6.9	535	7		1	1	1	4
<b>Seddon</b>	10.2	2.0	286	4			1	1	
<b>Blenheim</b>	202.6	72.5	713	302	9		2	2	6
<b>Havelock</b>	9.5	2.6	37	9	2		1	1	
<b>Picton</b>	61.0	17.2	189	59	3		2	1	3

Location/Asset Type	Mains (km)	Service Lines (km)	Meters	Back flow Preventor	Bores	Intake	Treatment Plants	Distribution Pump Stations	Booster Pump Stations
Renwick	17.1	6.6	49	22	6		1	1	
Riverlands	10.8	1.2	134	50	3			1	
Wairau	3.5	0.4	61	3	1		1	1	
<b>Total</b>	<b>462.3</b>	<b>109.4</b>	<b>2004.0</b>	<b>456.0</b>	<b>24.0</b>		<b>9.0</b>	<b>9.0</b>	<b>13.0</b>

## 1. Specific Challenges For This Asset

### 1.1. Drinking Water Standards

#### Upgrades

The upgrade of two water treatment plants in Blenheim in 2011 means the supply to the town now meets the requirements of the Drinking Water Standards New Zealand (DWSNZ.) The Picton water supply was upgraded to meet the standards in 2017 with the completion of the Speeds Road Water Treatment Plant (WTP). Construction has commenced on a new treatment plant at Seddon and designs are progressing for Renwick and Havelock. The treatment of water supplies to rural Awatere Riverlands and Wairau Valley will follow.

The Seddon water treatment plant was greatly assisted by a \$1 million subsidy from central government.

A number of upgrades of Water Treatment Plants have recently been completed or are underway;

2011	Blenheim – Middle Renwick Road and Auckland Street
2017	Picton – Speeds Road

2020	Awatere – Seddon Water Treatment Plant <sup>15</sup>
Underway	Renwick, new source, new reservoir, upgrade of treatment plant Havelock, new source, new treatment plant Wairau Valley, additional source, upgrade of treatment plant Riverlands, new source, new treatment plant
Planned	Awatere, Point of Entry (POE) devices

Funding the completion of the treatment plant upgrades for all areas will continue to be a challenge for the smaller communities of Renwick, Havelock, Wairau Valley and Awatere Rural. In 2016 the Council consulted Marlborough residents on their willingness to share the capital costs for the construction of treatment plants at Renwick and Havelock across all Marlborough ratepayers, and received strong support for this approach. The ongoing operational costs will be met by a district wide

<sup>15</sup> For treatment purposes, the large Awatere scheme has been split into two parts — the urban area of Seddon and the rural area of Awatere. A single treatment plant for Seddon (with the assistance of a Government subsidy) and point-of-entry treatment for each property in Awatere.

funding formula that will make a clean water supply more affordable for smaller communities by spreading the costs across all ratepayers. The Combined Drinking Water Funding was adopted in 2016.

The Awatere Rural system has a long-piped reticulation network serving a relatively small number of, mainly rural, lifestyle blocks. Much of the water is used for livestock drinking water or irrigation. A small disinfection plant installed at the point of entry into every home has been proposed as an alternative to centralised treatment for this area.

### Taumata Arowai and Water Services Bill

Taumata Arowai has been established as Crown Entity in March 2021 and will be responsible for the implementation of the Water Services Bill anticipated in July 2021. The Water Services Bill will replace the existing Drinking Water Standards of New Zealand (DWSNZ) and set the standards for supply and delivery of drinking water throughout New Zealand. Responsibility of this role will be removed from District Health Boards, where it currently sits.

### Private Water Schemes

The remaining 18% of the population access water individually or through privately managed schemes. An assessment of private water supplies was undertaken in 2019 to assess the potential effects and impacts changes to the DWSNZ may have to these supplies and to Council should we need to take responsibility for these. There were 40 schemes identified, serving a population of over 1,700 people that are not supplied by the Council.

### 1.2. Water Availability and Consumption

Partly due to the beautiful Marlborough weather, our region has some of the highest per capita water usage in the country. The current demand for water in Renwick and Havelock, and projected demand in Picton, is putting considerable strain on the groundwater aquifers from which the water is taken. The National Policy Statement on Freshwater Management (NPSFM) requires allocation limits to be set to protect the sustainability of natural water sources, and it is unlikely that the Council will be able to significantly increase its current water allocations in future consent applications and may even have further limitations imposed. The table below shows the designation of consents for water sources for the Marlborough Region.

Supply Areas	Source	Daily Consent Limit (m <sup>3</sup> )	Peak Summer Daily Demand (m <sup>3</sup> )	Average Winter Daily Demand (m <sup>3</sup> )	Consent Expiry
Blenheim	Bomford St	43,500	36,400	14,500	1/12/2030
	Middle Renwick				
Riverlands	Malthouse	7,700	6,100	1,327	1/07/2029
	Hardings Road				1/08/2024
Renwick	Terrace Road	5,000	3,650	1380	1/11/2028
	Conders Bend				1/11/2028

Supply Areas	Source	Daily Consent Limit (m <sup>3</sup> )	Peak Summer Daily Demand (m <sup>3</sup> )	Average Winter Daily Demand (m <sup>3</sup> )	Consent Expiry
<b>Awatere</b>	Black Birch Stream	8,000	2,820	1550	15/12/2029
<b>Havelock</b>	Kaituna River Catchment	2,000	1,150	500	1/07/2037
<b>Picton</b>	Speeds Road	7,900	6,210	2,970	1/10/2050
	Barnes Dam				30/09/2032
<b>Wairau Valley</b>	Wairau River	480	264	52	1/03/2048

### Groundwater

Saltwater intrusion detected in the Havelock bores is also an indication that more water is being abstracted from these than can be immediately recharged from the aquifer.

The water aquifer on the Wairau Plain is, in theory, over-allocated. In practice, not all users are using their permitted allocations. Considerable effort is being made to devise a system of re-allocation to allow consented volumes to be distributed equitably to meet the demands of current users, including the Council's public water supply requirements.

The water levels in the Renwick bores regularly drop during the summer peak demand period, as water is pumped out faster than it is replaced. Three new wells have been drilled at Conders Bend to support the Renwick water supply.

### Alternative Water Sources

Investigations have been undertaken to find alternative sources of water for Havelock. Abstraction from the Pelorus River Valley appears to have the most potential. For Picton, the nearest viable source is the

Tuamarina aquifer. The costs of developing and piping water from these new sources to the settlements is high. Water demand management strategies will delay, and possibly avoid, the need for this investment. Universal metering is a proven method to reduce demand. Other techniques such as leakage control, pressure management, public education and new technologies are less certain but can also result in more efficient use of water.

### Increasing Wine Production

The success of Marlborough wines around the world is hugely beneficial to the region. However, increasing production through additional vineyard hectares, or enhanced processing to add value to the primary product, will increase demand for water resources. A new source and water treatment plant is being established in St Andrews to support this and meet the DWSNZ.

### Climate Change

The eastern areas of Marlborough are predicted to experience longer periods of dry weather as a result of climate change. Water demand peaks during the dry spells as gardens are irrigated and swimming pools

are topped up. Longer droughts will increase the frequency and duration of periods of high demand, with potential implications for both water sources and the water supply infrastructure.

Continuous sea level rise over the next 100 years is generally regarded as inevitable. This will affect the freshwater–saline balance in groundwater systems and may further restrict the capacity of the Havelock water bores to continue to supply freshwater to the community.

### Demand Management

Renwick and Havelock are leading the way with meters fitted to household supplies, and volume-based charging for water use to be implemented in 2021. This will help to reduce volumes of water used for urban irrigation and other high use activities. In future, smart metering combined with advanced telecommunications and remote control of household appliances will allow customers to take advantage of lower tariffs for water and electricity during periods of low demand. Levelling out the times of high and low demand for water will help reduce the

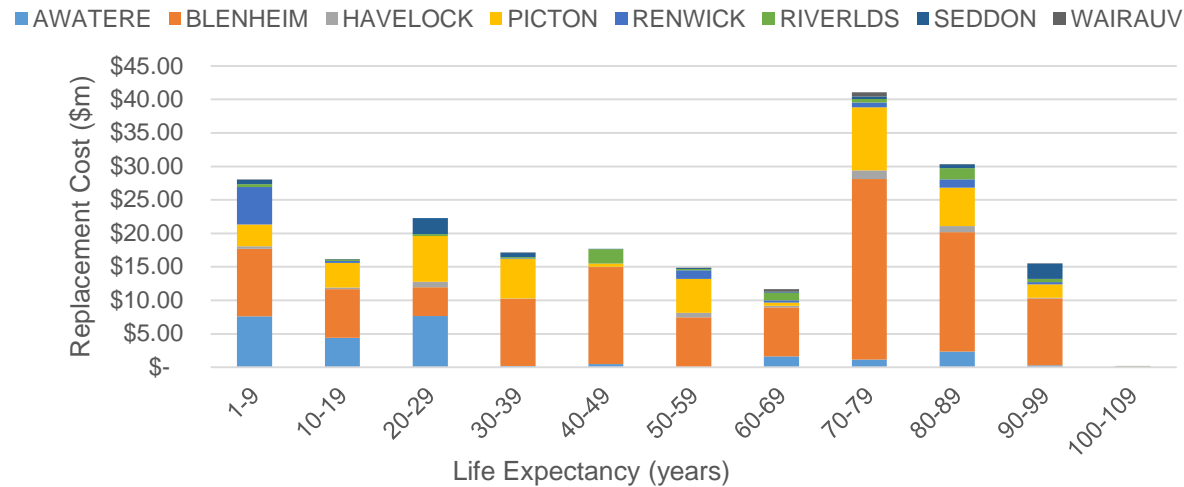
capacity requirements of future infrastructure and assist with more efficient designs. Following review of this works programme, it will be implemented across other water supply areas.

The introduction of rules through a local amendment to the Code of Practice for Subdivision could be used to encourage developers to install low water use plumbing apparatus and ‘grey-water recycling’ systems to new housing. This is a useful tool to manage demand for both water supply and wastewater services. However, it is difficult to implement retrospectively and it will take considerable time to yield results.

### 1.3. Ageing Infrastructure

The average of the water supply network is getting older (as shown in the graph). Yet the reticulation pipework continues to perform well with little evidence of the increased maintenance or burst frequency that might be expected from ageing assets. However, in order to avoid a deterioration of the level of service and unacceptable leakage a proactive renewals programme will be required.

Remaining Life of Water Assets



In addition, pipe rehabilitation and renewal using 'low-dig' techniques can significantly reduce the costs and disruption involved in replacing worn out pipes.

Installation of smart meters will make it much easier to identify where leaks are occurring in the water pipes carrying water between the mains and individual households.

Currently the specialist skills and equipment required to undertake these works are not readily available locally but are becoming more widespread in New Zealand. They and will become more competitively priced as the market develops. The costs of deploying national/international specialist companies to the region to undertake contract works can be reduced by larger contracts, for example shared services contracts with other councils, or comprehensive contracts for one supplier.

#### 1.4. Earthquake Risk

We know from Christchurch's experience that some of the older pipe materials (particularly asbestos cement and cast iron) do not perform well following earthquake ground shaking and liquefaction.

New pipe materials such as PVC, and particularly polyethylene, are more resistant to ground shaking and ground deformation than the older, more brittle, materials. There is a considerable legacy of asbestos cement and cast-iron pipes that may be regarded as less resistant. This is particularly the case for the Awatere water supply as the scheme was first installed in 1947 when asbestos cement was a popular pipe material.

All the new water infrastructure — treatment plants, reservoirs, pump stations and pipelines are being built to the latest design standards. These performed well in the November 2016 earthquake and other previous events.

Older reservoirs at the Cloudy Bay Business Park and Wither Hills have been strengthened to increase their resilience. The main reservoirs have been fitted with automatic valves which close when they detect

significant ground movement and prevent water from leaking away through ruptured pipes.

#### Impacts of Earthquakes

The new standards and materials will reduce the impacts of an earthquake. However, scientists are predicting the occurrence of a large event which will cause significant damage — partly because there is a legacy of older assets and partly because structures can be built to be earthquake resistant but cannot be made earthquake proof.

#### Insurance

The Council constantly reviews its insurance strategy in the light of new scientific research, a changing infrastructure base and an ever-changing insurance market. The Council prefers to avoid damage to the infrastructure through good engineering but there will always be a residual risk, and insurance can help to meet this financial liability.

## 2. Options to Respond to Each of These Identified Challenges, and Implications of These Options

### 2.1. Drinking Water Standards

Option	Implications
<p><b>PREFERRED OPTION</b></p> <p>Complete existing water treatment plant upgrades for Blenheim, Renwick, Riverlands, Wairau Valley and Havelock, and install treatment point-of-entry treatment for each property</p>	<p><b>Benefits:</b> All of the Council owned water supplies will meet the high standards for clean and safe drinking water.</p> <p><b>Costs:</b> The combined capital costs of the water treatment plants for Blenheim, Renwick, Havelock, Riverland's, Rural Awatere and Wairau Valley is in excess of \$57.9 million.</p> <p>To ensure the point-of-entry systems for Awatere Rural are regularly serviced, the Council will need to implement an annual service programme. Sending a service engineer to individual properties will be an ongoing operational cost.</p>

Option	Implications
in Awatere Rural.	
Consider alternatives to full compliance with DWSNZ on the grounds of affordability	<p><b>Benefits:</b> Reduces the financial burden on small rural communities.</p> <p><b>Costs:</b> Public health risks. Reputational risk particularly amongst tourists and foreign visitors. The option to not meet the DWSNZ on the grounds of affordability may be removed upon implementation of the new standards.</p>

## 2.2. Water Availability and Consumption

Options	Implications
Do nothing. Respond to water shortage issues as they arise, by introducing water restrictions during peak demand periods.	<p><b>Benefits:</b> This option defers capital investment and allows for future flexibility to respond to changes in population growth and to wait until we have more information about the impacts of climate change on the length and severity of droughts in Marlborough.</p> <p><b>Costs:</b> Additional operational costs in implementing and enforcing water restrictions. Potential for adverse impacts on public health, the economy, levels of service and reputation. This approach does not promote efficient water usage, which is an objective of the NPSFM, and may become mandatory in future.</p>
<b>PREFERRED OPTION</b> Universal metering and other demand management techniques.	<p><b>Benefits:</b> Water metering is a proven technique to reduce average water demand by approximately 25% and peak demand by around 30%. Other techniques (leakage control, pressure management, public education and use of new technologies) are less effective but can contribute to overall reduction in water use.</p>

Options	Implications
	<p><b>Costs:</b> The capital cost of installing meters in both Renwick and Havelock was \$0.73 million; and is \$2.1 million for Picton. The increased operational costs of meter reading and administration are approximately \$165k per annum.</p>
Amend the Code of Practice for Subdivision to include water saving techniques such as grey water recycling in all new homes.	<p><b>Benefits:</b> New homes will be built with low use apparatus, grey water recycling and water conservation will become normal practice.</p> <p><b>Costs:</b> Small additional costs to new house build costs but it will be a long time before sufficient houses are at the new standard to have a significant effect on communities' levels of water use. Retrofitting devices can be costly and difficult to implement.</p>
Access alternative sources of water for Picton and Havelock.	<p><b>Benefits:</b> Increases certainty of water supply for Picton and Havelock residents. This option would ensure water supply is not a limiting factor for future growth.</p> <p><b>Costs:</b> Development of the Pelorus River abstraction piping and additional treatment is estimated to cost \$5.6 million. Development of the Tuamarina source and piping to Picton is estimated to cost \$12 million.</p> <p>Note: These estimates exclude consent application costs as well as annual operation and maintenance costs.</p>

## 2.3. Ageing Infrastructure

Option	Implications
Renew non-critical mains when failure rates become	<p><b>Benefits:</b> Ensures that only pipes that have reached the end of their useful life are replaced.</p>



Option	Implications
intolerable.	<b>Costs:</b> Downstream customers will experience a deterioration in service as supply interruptions increase. Operation and maintenance costs will increase. Unpredictable renewals make budget and resource planning difficult. Unplanned work is more disruptive and expensive than a planned programme of renewals.
<b>PREFERRED OPTION</b>  Implement a proactive, planned pipe renewals programme based on critically and invest more in condition assessment technology, field data collection and data management.	<b>Benefits:</b> Avoids unacceptable deterioration of the level of service and allows efficient, targeted investment in planned renewals works. Pipes are replaced based on their criticality e.g. critical pipes are replaced before the end of their useful lives, non-critical pipes are replaced at or beyond their useful lives.  <b>Costs:</b> Additional costs of pipe sampling, analysis and data collection to improve pipe and asset condition assessments and ensure well targeted renewals and efficient investment.

#### 2.4. Earthquake Risk

Option	Implications
<b>PREFERRED OPTION</b>  Prioritise replacement of asbestos cement and cast iron pipes in areas where they have	<b>Benefits:</b> Will increase resilience to pipeline damage and assist with more rapid recovery following a large earthquake.  <b>Costs:</b> The total value of the asbestos cement and cast iron water mains is around \$55.5 million. To replace all pipes of these materials in the next 30 years it will be necessary to bring forward the replacement of 94kms of pipe

Option	Implications
deteriorated more quickly than anticipated.	at an approximate cost of \$31 million.
Provide financial contingency to replace these pipes urgently if a significant earthquake occurs.	<b>Benefits:</b> Recognises damage from any particular earthquake is difficult to predict and saves money to use in response to damage following actual events.  <b>Costs:</b> Disrupted water supplies and longer restoration times will increase public health risks and reduce levels of service following an earthquake. Materials and resources will be in short supply, which means premium costs would apply to undertake restoration works. Emergency repairs followed by renewals will duplicate costs in some instances.

### 3. Most Likely Scenario

#### 3.1. Drinking Water Standards

The most likely scenario is that the Council will complete the upgrade of water treatment plants to meet the requirements of the DWSNZ for all water supply areas. Renwick, Havelock, Riverlands and Wairau Valley treatment plants are planned for completion in 2020, 2024, 2023 and 2023 at a cost of \$7.6 million, \$7.3 million, \$12 million and \$0.8 million respectively.

As an alternative to building a large treatment plant for the Awatere Rural supply to disinfect the water before it is distributed, it is more practical to install small treatment units to each dwelling at the point of entry of the supply pipe.

This approach will consist of around 540 small disinfection units. The installation cost of this has been estimated to be around \$1.5 million. However, each unit will need to be regularly serviced and the costs of ongoing maintenance will increase.

It is likely that all supplies will need to be chlorinated as a result of the new drinking water standards. If this change occurs, some additional plant would be required at the Blenheim treatment plants and there would be ongoing operational costs.

Increased monitoring of the water quality supplied is also likely to be required. This might include installing chlorine monitoring points on the distribution system and taking additional tap samples for laboratory analysis. These additional costs are included in the operational cost projections in the following section.

The Council will wait for direction from central government on whether water fluoridation is required. In order to be prepared for that situation, the Council will investigate the costs for installation of fluoridation dosing plant and the ongoing maintenance at all treatment plants. The overall costs are not likely to be very high.

### *3.2. Water Availability and Consumption*

Universal metering has now been installed in Havelock and Renwick as a means of demand management. The most recent census has shown that growth in Picton has slowed significantly and a decision on metering can be delayed. It is probable that within the span of this strategy that metering will be adopted for all of the Council's water supply schemes. Improving our knowledge on actual water usage and demand patterns will improve our understanding of our total leakage across our networks and to improve our water availability.

More active leakage detection, repairs and renewals are likely to be employed in all areas to reduce wastage and demonstrate efficient use of the resource.

Developments in technology in 'smart meters' and remote control of household appliances will allow customers to have more choices about how they manage their water consumption patterns. They will be able to understand their water usage and will be able to manage their use to reduce peak demands, allowing the Council (and the community) to benefit from more efficient sizing of the supply infrastructure.

### *3.3. Ageing Infrastructure*

There will be a relatively small but growing water pipe renewals programme over the next 10 years which will increase significantly over the following 20 years as the ageing pipe network begins to struggle to meet customers' expectations. Critical pipes and materials that are expected to perform less well in an earthquake will be prioritised for replacement.

The replacement of asbestos cement mains in Renwick will be completed by 2022, improving the level of service, reducing maintenance costs and also leakage across this network.

Data collection on asset condition and performance is improving and is building into a more accurate picture of where renewals works can be most effectively targeted. More resources will be allocated to pipe condition assessments to inform the renewals programme.

### *3.4. Earthquake Risk*

Major new assets will be built to the current high standards of earthquake resistance. Networks will be designed with increased inter-connections to allow flexibility of supply in the event of earthquake damage. Additional strengthening will be retrofitted for critical assets and less resistant pipe materials will be replaced as part of the renewals programme. The residual risk will be mitigated with financial contingencies to meet the realistic costs of repair. The insurance sector has helped the council to calculate the 'maximum probable loss' from the most recent experience around the country and is assisting the Council with its risk management plans.

## *4. Table of Major Projects for This Activity*

A brief summary of upcoming projects for this asset is shown below, and includes an indication of the main reasons for the projects. Many of these have multiple drivers that span the challenges identified in the earlier sections of this chapter.

The key 'drivers' of investment are:

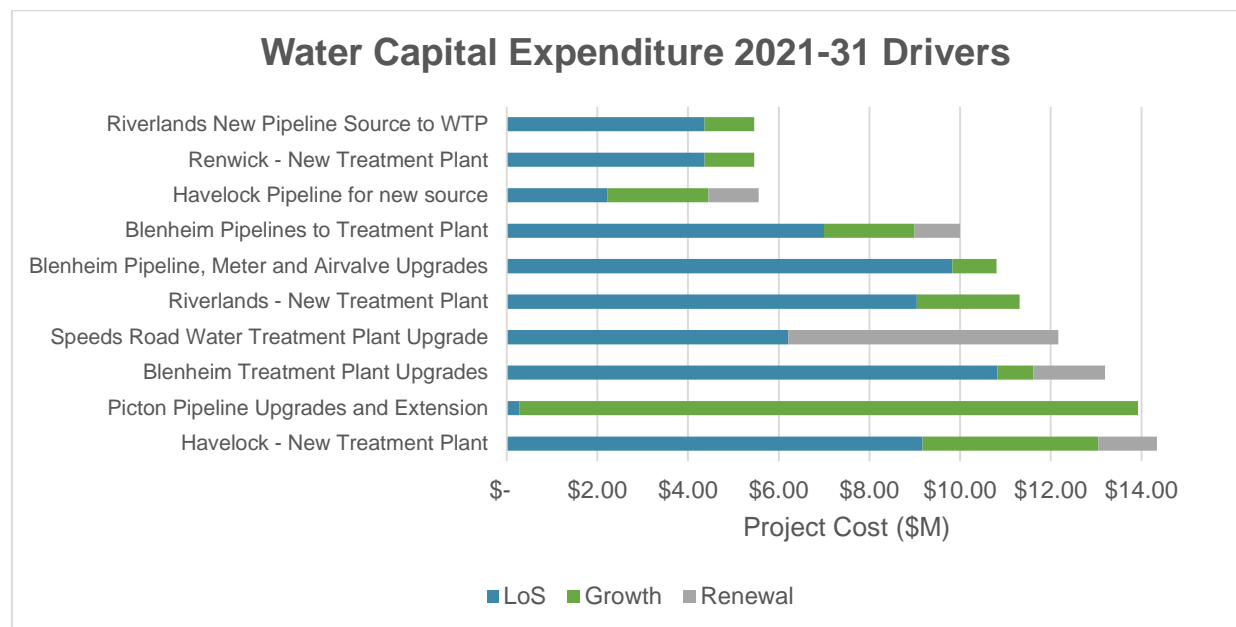
- Growth — investment to provide additional capacity to cope with increased demand for the service due to population growth or increased usage
- Levels of service — investment to improve the service customers receive

- Renewals — investment to replace worn out or inefficient assets.  
\*Costs exclude overheads, financing and inflation.

Asset Type	Project	LoS %	Growth %	Renewal %	2021/ 2022	2022/ 2023	2023/ 2024	2024/ 2025	2025/ 2026	2026/ 2027	2027/ 2028	2028/ 2029	2029/ 2030	2030/ 2031	
<b>Awatere Rural</b>															
Storage	Lions Back Reservoir Renewal			100	\$1.2M										
Storage	Reservoir Renewals, Replacements and Upgrades	12	40	48	\$1.59M										
Treatment	Point of Entry Treatment	95	5			\$1.52M									
<b>Blenheim</b>															
Reticulation	Pump Stations and Wells	70	10	20						\$2.5M					
Reticulation	Pipeline Upgrades for Fire/Capacity	27	40	33	\$2.62M										
Reticulation	Pipeline, Meter and Airvalve Upgrades	91	9		\$0.08M							\$10.7M			
Reticulation	Wither Road Booster Pump Station Upgrade	83	9	8						\$1.78M					
Treatment	Blenheim Treatment Plant Upgrades	82	6	12	\$5.7M					\$7.5M					
<b>Havelock</b>															
Treatment	Pipeline for new source	40	40	20									\$5.56M		
Treatment	New Treatment Plant	64	27	9	\$7.35M										
<b>Picton</b>															
Treatment	Essons Pipeline Upgrade	100						\$1.2M							
Reticulation	Speeds Road Pipeline Renewal			100	\$4.2M										
Treatment	Speeds Road Water Treatment Plant Upgrade	51		49	\$6.17M										
Reticulation	Water Metering	70	20	10	\$2.12M										
<b>Renwick</b>															
Treatment	New Pipelines from Source to Treatment Plant	75	20	5	\$1M										
Treatment	New Water Treatment Plant	80	20		\$5.46M										

<b>Riverlands</b>										
Treatment	New Pipelines from Source to Treatment Plant	80	20			\$5.46M				
Treatment	New Treatment Plant	80	20			\$11.3M				
<b>Wairau Valley</b>										
Treatment	New Water Treatment Plant	75	25			\$0.79M				
Reticulation	Watermain Extension		60	40			\$0.3M			
<b>Combined</b>										
Reticulation	New Water Connections		100						\$1.1M	
Reticulation	Pipeline Renewals - Renwick, Havelock, Riverlands								\$1.02M	

The graphs below shows the expenditure and drivers of the top ten water supply capital projects based on project cost;



## Wastewater

For Marlborough to achieve its vision for the future, the infrastructure must be sufficient and functioning; achievable and sustainable with the resources available.

### Wastewater Goals

- Wastewater Treatment Plants will fully comply with current and anticipated discharge standards.
- Wet weather sewer overflows will not occur from storm events with a frequency of less 10-year ARI.
- Future treatment plant upgrades will be designed to avoid cultural offence by removing or reducing effluent discharges to the aquatic environment.
- The wastewater network will meet the statutory obligation under the Civil Defence Emergency Management Act to function as fully possible after an emergency event.

### Introduction

With an asset value of \$265.5 million, wastewater is the second largest asset group owned by the Council.

The huge success of the Marlborough wine industry has created challenges for the Council. During vintage there is a ten-fold increase in the discharge of trade effluent from the wineries. The total load on the

Blenheim wastewater treatment plant is five times as much as normal. For a few weeks between March and May each year the wastewater treatment plant is required to process a load equivalent to the wastewater produced by 120,000 people. In terms of wastewater Blenheim becomes the fifth largest city in New Zealand.

To meet this demand the treatment plant has undergone a number of upgrades. Capacity was significantly increased in 2009 with the addition of an advanced dissolved air flotation (DAF) treatment plant. Tertiary treatment wetland ponds (established in 2013/14) improve the quality of the final discharge and allows a portion of the final effluent to be returned to irrigate the land. The Council will continue to collaborate closely with the wine industry to ensure additional wastewater processing capacity is available as production grows.

Wastewater processing capacity may also need to increase at other treatment plants to manage **growth**. For example, the relatively small treatment plant at Havelock cannot accommodate high loads of organic trade waste (from seafood processing) and is currently in the process of being upgraded.

The discharge of human waste to the aquatic environment is a cause of cultural offence to the indigenous iwi. Council is working with the local iwi to remove or minimise the discharges from the treatment plants

The following table provides a summary of the Council's wastewater systems.

Area	Sub Area	Treatment Plants	Biofilters	Pump Stations	Grinder Pumps	Mains (km)	Connections
Blenheim	Blenheim	1	3	37	57	198.3	7953
	Grovetown				1146	17.0	833
	Spring Creek			2		3.6	142
	Renwick			1		15.0	833
	Riverlands		1	5		11.5	121

Area	Sub Area	Treatment Plants	Biofilters	Pump Stations	Grinder Pumps	Mains (km)	Connections
Havelock		1		6		9.7	293
Picton		1		9		49.7	1644
Seddon		1		2		7.3	189
TOTAL		4	4	62	1203	312.1	12008

The wastewater system collects and treats the wastewater from both domestic and industrial properties. Currently the treatment plants at Blenheim and Havelock are on low lying coastal plain that is vulnerable to liquefaction associated with earthquake shaking and tsunamis. The design of treatment plants needs to be **resilient** to sea level rise and storm surges that may result from **climate change**. The Havelock Wastewater Treatment Plant is currently in the process of being relocated to remove this risk.

As the wastewater reticulation ages, stormwater is able to seep into leaky joints. The **levels of service** are challenged when the ingress of stormwater into the wastewater system causes wastewater overflows during severe storms, with subsequent insanitary conditions and pollution of waterways. Reduction of stormwater infiltration and improved resilience of the pipe network to earthquake damage are two major benefits from a well targeted **renewals** programme.

## 1. Specific challenges

### 1.1. Growth in Demand Related to Trade Waste and Urban Development

There are a number of growth-related challenges for wastewater treatment.

Certain industries create large volumes of liquid waste with high organic content. These require far more treatment than normal domestic sewage and can quickly overwhelm the treatment capacity of a plant designed for an urban population. Blenheim wastewater treatment plant has

undergone several major upgrades in recent years to cope with the demand from the wine industry. The upgrades have been planned and funded by the wineries. As growth continues, further upgrades are likely.

The Council is committed to ongoing communications with industry representatives and individual businesses to ensure infrastructure is provided to meet demand and to overcome uncertainties about the required timing of upgrades, given that the popularity of Marlborough wines in the world market has led to very rapid growth in volumes. The funding methodology will be agreed at this time.

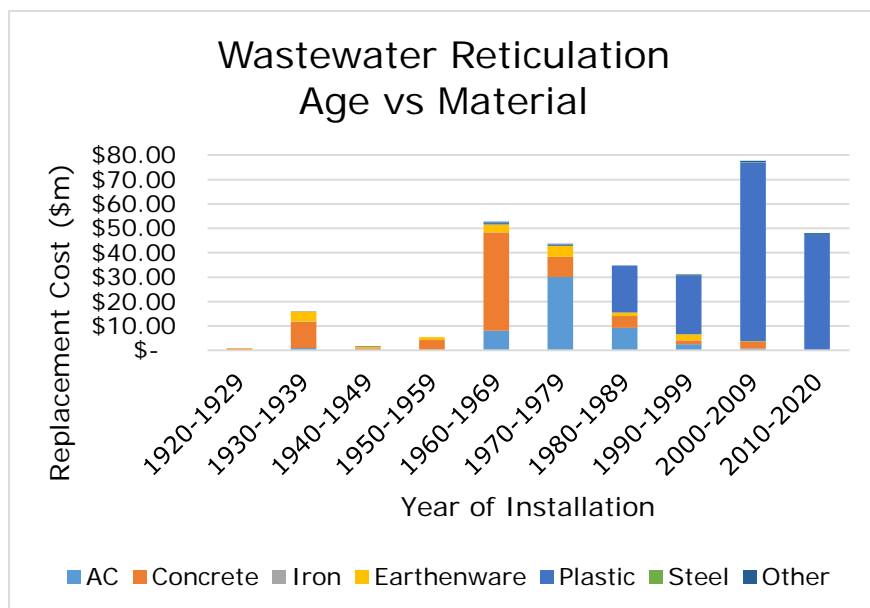
The smaller treatment plants at Havelock and Picton have limited capacity to deal with additional trade waste growth. This can be an issue for industries such as seafood and meat processing. Processing can add value to exports and create jobs, but early consideration needs to be given to the treatment of the associated liquid wastes.

The Marlborough Urban Growth Strategy has identified land for future growth pockets in each settlement. The land is often on the periphery of the existing settlements and requires new pipework and upgrades to the existing reticulation to accommodate the additional flows. For example, development to the west and north of Blenheim and further development in Waikawa requires careful design as these areas are a considerable distance from the treatment plants. These projects are currently in progress. Sequencing the order of development will assist in construction and ensure the system is installed in an efficient manner. The Council's Development Contributions Policy has been updated to reflect these costs.

## 1.2. Renewals

The age profile of the wastewater network indicates that \$28 million worth of pipes will reach the end of their useful life within the next ten years followed by a further \$38 million worth of pipes in the following 20 years. Work is constantly being undertaken to assess the condition of pipes using CCTV and during reactive and planned maintenance tasks. Assumptions on life expectancy are reviewed annually during the valuation process based on specific network knowledge and national and international data that is available.

The chart below shows the age profile and pipe materials of the wastewater reticulation. The large spike in PVC/Polyethylene during the 2000s coincides with new sewers installed in Renwick, Spring Creek and Grovetown. Pipe replacement assumes most buried mains will be will serviceable for 80 to 100 years. However, this can vary considerably for a variety of reasons and the assumption needs to be verified through continual pipe condition assessment and likely rates of deterioration.



The Council has implemented a proactive, planned renewals programme and have invested more in condition assessment technology, field data collection and data management to address the renewal challenges, which are described in more detail below. New installation and pipe rehabilitation techniques are becoming more commonplace, reducing the costs and disruption of renewal upgrades.

## Earthquakes

The Blenheim and Havelock Wastewater Treatment Plants are built on coastal plains. The areas are flat and low-lying and vulnerable to tsunami inundation. The land is also prone to liquefaction and ground deformation which could have important consequences, as the flows through the plant rely on gravity flows along a shallow gradient. For this reason, the Havelock Wastewater Treatment Plant is being relocated to new site with less risk of damage. The new Treatment Plant should be commissioned by 2026.

Earthenware pipes are particularly vulnerable to ground movement. Asbestos cement and the older concrete pipes also perform less well. PVC plastic mains perform better. Polyethylene mains perform best of all, but these pipes do attract grease and fat which sticks to them, so they need to be cleaned more regularly.

## Climate Change

Stormwater infiltration into the wastewater network becomes a more significant problem during storms and when groundwater levels are high. Climate change is likely to make this problem worse as storms are predicted to become more intense and frequent.

Hotter drier summers will have an impact on the bacteria and algae used in the wastewater treatment process, because they require dissolved oxygen in the wastewater to effectively process the waste into treated effluent. Dissolved oxygen decreases as the temperature of the ponds increases. Additional aeration plant may be required to increase the oxygen in the treatment ponds.

The Seddon Wastewater Treatment Plant discharges to the Starborough Creek which can have very low natural flows. The impact of the

discharge may be affected by a change in the volume and temperature of the receiving water.

The Blenheim Wastewater Treatment Plant includes a facility to recycle a portion of the treated effluent to irrigate land. This is only permitted when the soil requires additional moisture and when the groundwater levels are low enough to prevent surface ponding. Longer, drier summers may prolong the irrigation season but rising sea levels may raise the groundwater levels, preventing irrigation.

### Cultural Values

Iwi have a strong cultural relationship with the environment, and the disposal of human waste into the aquatic environment is of concern to them. The Council is working with Iwi on an Iwi engagement plan, and will continue to work with Iwi on mutually acceptable solutions to wastewater management. A pipeline has been installed alongside the Picton Trunk Main upgrade. It will facilitate the recycling of treated effluent for irrigation at a later date. Further improved practices can be expected over time.

### Infiltration & Inflow

The capacity of the wastewater system can be put under strain from the additional flow due to the ingress of stormwater through inflow or infiltration. Leaky joints in pipes and manholes, and accidental connections between stormwater and wastewater pipes, all contribute to the problem.

Finding the source of ingress can be time consuming and expensive. Progress is often frustrated as fixing one area is quickly replaced by infiltration from another area. It can also be difficult to identify if the leak is on the public pipework or within private property. Pipe renewal can be a more sustained solution than repairing individual leaks.

### New Technologies

Similar to water supply assets, the adoption of new 'smart' technologies by residents will give them more choices about how they use water, and this is likely to smooth the peaks and troughs of wastewater flows,

allowing for more economic designs. Grey water recycling and water-efficient appliances will counterbalance the increase in growth

New treatment processes are being developed and high quality treated effluent discharges are becoming easier to achieve consistently. Many new treatment technologies are becoming 'scalable'. It may become efficient for small businesses, and even domestic properties, to treat their wastewater. This will reduce both the strength and the volume discharged to sewer and enable recycling of a portion of the 'grey water' for use as irrigation or other low-quality uses.

## 2. Options and Implication

### 2.1. Increased Demand Related to Trade Waste

Options to address it	Implications of the options (financial and non-financial)
<p>PREFERRED OPTION</p> <p>Ongoing communications with industry representatives and individual businesses to ensure infrastructure is provided to meet demand.</p>	<p><b>Benefits:</b> Local economy allowed to grow to meet the market and support local jobs and prosperity.</p> <p><b>Costs:</b> Approximately \$25.8M upgrade to Industrial part of the Blenheim Wastewater Treatment Plant by 2030. Ensure equitable funding mechanism is agreed with industries in advance, and ensure land availability, resource consent and cultural sensitivities are addressed at an early stage.</p>
<p>Do nothing. Cap effluent discharges once existing treatment capacity is reached.</p>	<p><b>Benefits:</b> No further investment in infrastructure required and certainty that levels of service can be maintained for existing customers.</p> <p><b>Costs:</b> Economic development restricted, requiring industries to relocate.</p>



Options to address it	Implications of the options (financial and non-financial)
Assist industries to develop on-site alternatives to disposal to the wastewater system.	<p><b>Benefits:</b> Industrial development is not restricted by wastewater reticulation and treatment capacity. The costs of wastewater are borne by those responsible.</p> <p><b>Costs:</b> Efficiencies of scale are lost and businesses could become less viable or relocate. Increased costs in monitoring.</p>

## 2.2. Increased Demand Related to Urban Growth

Options to address it	Implications of the options (financial and non-financial)
Install conventional sewerage system on new sub-divisions and upgrade downstream infrastructure as necessary	<p><b>Benefits:</b> Wastewater disposal was considered at the outset of the Urban Growth Strategy and selection of growth pockets. Relatively minor downstream upgrades required. Downstream upgrades will help to resolve some levels of service issues with inflow &amp; infiltration</p> <p><b>Costs:</b> Some upgrades will lead to premature replacement of functioning assets</p>
Install non-conventional vacuum or grinder pump system	<p><b>Benefits:</b> Lower flow volumes as less susceptible to inflow &amp; infiltration consequently smaller diameter reticulation and reduced installation costs. Lower impact on downstream infrastructure</p> <p><b>Costs:</b> Increased mechanical infrastructure with subsequent on-going maintenance costs. Unproven modern technology.</p>

## 2.3. Renewals

Asset renewals will assist the Council to address the challenges associated with infiltration/inflow, climate change, earthquake risk and cultural values and the opportunities of new technologies

Options to address it	Implications of the options (financial and non-financial)
Do nothing. Renew pipes as and when they fail.	<p><b>Benefits:</b> Certainty of targeting pipes at the end of their useful life. Investment delayed as long as possible.</p> <p><b>Costs:</b> Increased overflows and insanitary conditions. Older pipes remain vulnerable to earthquake damage. Costs of increased maintenance and unplanned works. Increased pumping and treatment of infiltration and inflow.</p>
<p>PREFERRED OPTION</p> <p>Implement a proactive, planned renewals programme and invest more in condition assessment technology, field data collection and data management.</p>	<p><b>Benefits:</b> Avoids unacceptable deterioration of the level of service. Prevents damage to the environment and public health risks from sewage overflows. Allows efficient, targeted investment in planned renewals works. Comprehensive condition grading will allow targeted renewals and an opportunity to 'smooth' the renewal expenditure</p> <p><b>Costs:</b> Additional costs of CCTV surveying, pipe sampling, analysis and data collection to improve pipe and asset condition assessments and ensure well targeted renewals and efficient investment.</p>

Options to address it	Implications of the options (financial and non-financial)
Implement a pipe rehabilitation programme using a variety of rehabilitation techniques – patching, relining & renewals	<p><b>Benefits:</b> Rehabilitation can be targeted at specific pipes or sections of pipe avoiding wholesale renewal costs</p> <p><b>Costs:</b> Very high-quality condition data required. Specialist techniques and skills may not be available locally and incur additional establishment costs. Many rehabilitation techniques are relatively recent and have not been tested over a prolonged time and have unproven durability</p>

### 3. Most likely Scenario

This section provides an overview of the preferred options, and what this means for levels of service, and for costs.

#### 3.1. Growth Related to Urban Growth

The provision of wastewater services was considered during the development of the urban growth strategy and the Housing Assessment being undertaken at the time of writing this LTP. Servicing the identified growth pockets will be achievable with some downstream upgrades some of which are currently in progress.

On-site wastewater will be installed by the developer to an agreed services plan. Council will collect and distribute development levies to fairly allocate the costs of over-sized infrastructure that a developer may incur for the benefit of subsequent development.

The costs of downstream upgrades have been estimated and added included in a revised Developer Contributions model.

Conventional gravity wastewater with pump stations is preferred. Modern materials and installation quality will minimise inflow and infiltration problems.

#### Growth Related to Trade Waste

The continued success of Marlborough wines in national and international markets will drive-up demand for increased grape processing capacity. The wine industry is rapidly becoming the dominant industry in the region and facilitating growth by the provision of wastewater treatment will contribute to the continued development and prosperity.

Close monitoring of effluent volumes and strengths is undertaken each year during the vintage. Liaison with representatives of the industry will assist with anticipating the timing of future upgrades agree a funding mechanism from each of the contributory wineries in advance.

Feasibility studies have been undertaken to upgrade the processing capacity of the Blenheim Wastewater Treatment Plant to meet the projected peak demand periods between March to May each year. An outline of treatment plant upgrades has been prepared. Detailed design and construction will be planned to meet the growth in demand.

#### 3.2. Renewals

The useful service lives of infrastructure assets are considered annually during the valuation process. Condition data collected through CCTV, planned and reactive maintenance across the network validates this data.

Additional resources will be allocated for pipe condition surveys through CCTV in targeted areas and pipe sampling where maintenance takes place. Data is continually gathered to enhance the targeted renewals programme. Plans will be developed to manage the predicted peak in renewals from 2048 to smooth the peak once a prioritised assessment has been completed.

Modern 'low-dig' renewal and rehabilitation techniques will be assessed if they can be efficiently deployed and have a proven track record.

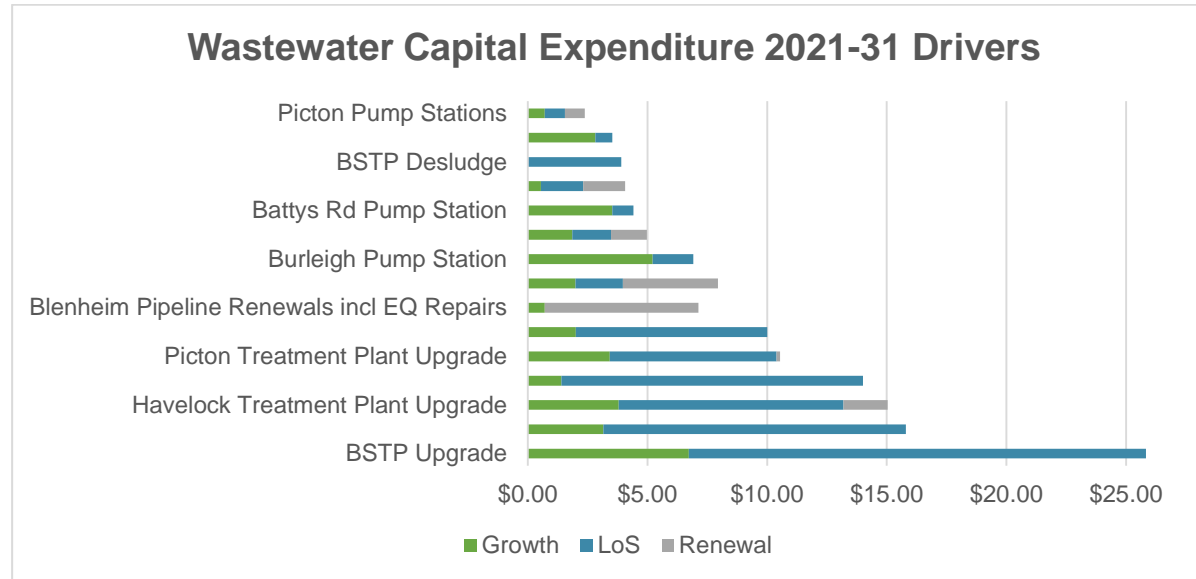
#### 4. Major Projects For This Activity

A brief summary of upcoming projects for this asset and to explain the reasons for these choices, which expand on the categories of growth, renewal and levels of service in the table

Asset Type	Project	Growth %	LoS %	Renewal %	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030	2030/2031
<b>Blenheim</b>														
Treatment Plant	Blenheim Wastewater Treatment Plant Upgrade	26%	74%		\$25.8M									
Pipelines	Reclaimed Water Reticulation	20%	80%							\$10M				
Pump Stations	MOPS Pump Station Upgrade	25%	25%	50%	\$7.95M									
Pipelines	Blenheim Pipeline Renewals incl EQ Repairs	10%		90%	\$7.1M									
Pump Stations	Burleigh Pump Station Upgrade	75%	25%				\$6.92M							
Pipelines	Blenheim Modelled Pipeline Upgrades	37%	32%	30%	\$4.98M									
Pump Stations	Battys Rd Pump Station Upgrade	80%	20%								\$4.42M			
Treatment Plant	Blenheim Wastewater Treatment Plant Desludging		100%		\$7.8M									
Pipelines	MOPS to BSTP Pipeline Upgrade	80%	20%								\$3.53M			
Pipelines	Burleigh Pipeline Upgrade	20%	80%						\$1.94M					
Pipelines	Muller Road Wastewater Renewal	5%	12%	83%	\$1.53M									
Pump Stations	Blenheim Pump Station Renewals			100%	\$1.38M									
Pump Stations	Blenheim Pump Station Generators		100%		\$0.3M				\$0.3M				\$0.3M	
Pipelines	Murphy/Adams/Colemans/Cherry Pipeline Upgrade	59%	9%	33%			\$0.6M							
Pump Stations	Purkiss St North/Kingwell Moorings Pump Station Renewal	24%	23%	53%	\$0.58M									
Pump Stations	Blenheim Modelled Pump Station Upgrades	33%	33%	33%	\$0.47M									
Pipelines	Purkiss Street Pipeline Replacement	11%	44%	45%	\$0.35M									
<b>Havelock</b>														
Treatment Plant	Havelock Wastewater Treatment Plant	25%	62%	12%	\$9M								\$6M	
Pump	Havelock Pump Station Renewal	10%	40%	50%	\$0.65M		\$0.6M							

Asset Type	Project	Growth %	LoS %	Renewal %	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030	2030/2031
Stations							M							
<b>Picton</b>														
Treatment Plant	Picton Wastewater Treatment Plant	33%	66%	1%	\$10.5M									
Pipelines	Picton Pipeline Replacements	14%	43%	43%	\$4M									
Pump Stations	Picton Pump Station Upgrades	30%	35%	35%	\$2.38M									
Pipelines	Picton Pipeline Renewals incl EQ Repairs	10%		90%	\$1.78M									
<b>Renwick</b>														
Pump Stations	Renwick Pump Station Upgrade	100%								\$1.2M				
<b>Riverlands</b>														
Treatment Plant	Blenheim Wastewater Treatment Plant Industrial Upgrade	20%	80%		\$15.8M									
<b>Seddon</b>														
Treatment Plant	Seddon Wastewater Treatment Plant	10%	90%		\$14M									
<b>St Andrews</b>														
Pipelines	St Andrews Pipeline Upgrade	14%	86%				\$1.05M							
<b>Combined</b>														
Connections	New connections across Region	100%			\$0.67M									

The graphs below shows the expenditure and drivers of the top ten wastewater supply capital projects based on project cost;



### Stormwater

For Marlborough to achieve its vision for the future, the infrastructure must be sufficient and functioning; achievable and sustainable with the resources available

#### Stormwater Goals

- The habitable floors of all properties within urban stormwater areas will not experience flooding from storms that, on average, will occur once in 50 years or less
- All properties within urban stormwater areas will not experience flood water from storms that, on average, will occur once in 10 years or less.

- Discharges of urban stormwater will not cause a deterioration in the quality of the receiving water beyond the standards of the time.

#### Introduction

The stormwater infrastructure is a reticulated network of pipes, channels, pump stations and associated apparatus required to drain rainwater from residential, commercial and industrial properties and surrounding land. The service is predominantly focused on the urban areas where buildings and other structures disrupt the natural flow paths of surface water drainage and hard surfaces, such as roofs and roads, prevent rainwater from being absorbed into the ground.

Stormwater drainage relies on discharging rainwater to rivers and streams as well as man-made channels. As a unitary authority (with both regional and district council responsibilities) the Council manages both

the man-made stormwater pipes, drains and natural water courses. Close, coordinated management between the stormwater management staff and rivers and land drainage staff is essential to achieve an effective and efficient drainage of surface waters. This arrangement was incorporated in the Blenheim Stormwater Strategy, which was adopted in 2012. The strategy provides an integrated and holistic approach to stormwater management with clearly defined objectives to manage the quantity and quality of stormwater across Blenheim.

The Stormwater Action Group (SAG) is a collaborative working relationship between the Council's Rivers & Land Drainage, Stormwater and Operations departments is proving to be an effective mechanism for implementing the stormwater strategy. The strategy is a detailed analysis of the stormwater issues for the town and is a fundamental element of infrastructure planning. The strategy groups many small drainage catchments throughout Blenheim into 11 Stormwater Management Areas (SMAs.) Detailed, integrated action plans are being developed for each SMA which will meet the future requirements for growth in stormwater flows and quality standards.

The urban **growth** pockets identified to the north-west of Blenheim are in the headwaters of many local creeks. Development of these areas, coupled with increased rainfall from climate change, needs to be managed carefully to prevent negative consequences downstream. The Springlands Stormwater Management Area Plan (SMAP) has been developed and links all of the work done in this area.

Many of the spring-fed creeks passing through Blenheim, and upland streams passing through the smaller settlements, have high quality water and pristine aquatic habitats. Increased public concern over the quality of New Zealand waterways has been recognised through the National Policy Statement for Freshwater Management (NPSFM). New developments include low impact design techniques for on-site treatment of stormwater. Infrastructure may need to be retrofitted to ensure existing stormwater discharges meet the new **level of service** standards.

The expectation of more intense storms as a result of **climate change** must be accommodated through a combination of larger pipes, channels

and pump stations, overland secondary flow paths and specially designed detention areas that will hold back the peak flows, preventing downstream flooding.

Similar to water and wastewater assets, much of the underground stormwater reticulation is reaching the end of its useful life and will need to be renewed. A very significant peak of around a third of the total asset value (of \$20.9million) is anticipated from around 2050 – just at the edge of the planning horizon of this strategy.

The following table provides a summary of the Council's stormwater systems.

Area	Length mains (km)	Pump Station
Anakiwa	0.8	
Blenheim	134.0	2
Grovetown	0.7	
Havelock	2.5	
Okiwi	0.8	
Picton	29.5	1
Renwick	5.5	
Riverlands	6.8	
Seddon	0.9	
Sounds	0.3	
Spring Creek	3.6	
St Andrews	0.3	
<b>TOTAL</b>	<b>185.8</b>	

## 5. Specific Challenges For This Asset

### 5.1. Stormwater Quantity

#### Urban Growth

The Marlborough Urban Growth Strategy has identified pockets of land to accommodate the expected demand for housing in the future. For Blenheim a land area of around 160ha was identified to the north and west of the existing town. The natural drainage for these areas is from west to east meaning that the stormwater will feed into streams that pass through the existing urban area and to some extent are part of the urban drainage infrastructure. Development in the headwaters of these catchments requires careful design to ensure there are no adverse effects downstream.

This became very apparent with the development of a large retail park and proposed residential development in an area that drains to Murphy's Creek. The downstream residents were very concerned over the increased input of stormwater and the potential for both flooding and deterioration of water quality. An independent arbitrator worked with the Council and the residents to resolve these concerns using a structured decision-making process. Over the course of 18 months a mutually acceptable solution was reached.

The solution included many features that may be expected to be included in future stormwater designs. Land within the new development has been assigned for stormwater detention. This will detain part of the run-off and help reduce the peak flow. Dished, grass swales will provide a flow path for stormwater whilst at the same time increasing infiltration into groundwater. This natural process will provide primary treatment by removing some of the suspended solids and other contaminants from the run-off. A regulated portion of the flow will be directed into the existing Murphy's Creek and the remainder directed to the Taylor River through a new stormwater pipe. Development of the Stormwater Management Area Plan for Springlands in 2020 also assisted in a collaborative approach across Council and local residents to managing stormwater in this area, monitoring it and setting a benchmark to achieve.

#### Climate Change

Strategies to manage the effects of more intense storms are considered in all future infrastructure assessments. Building bigger infrastructure and ensuring renewed pipes are sized to meet the new standards will be important. Advanced mathematical models are used to project future stormwater flow patterns and ensure infrastructure is designed with sufficient contingency to accommodate the current uncertainties. A good understanding of historic rainfall patterns and the powerful hydraulic models allow different combinations of factors to be simulated. Non-infrastructure alternatives can be modelled and the engineering solutions adjusted.

The use of overland flow paths along roads can avoid the expense of installing additional stormwater infrastructure, but roads and adjacent properties need to be designed appropriately to provide this function. Stormwater detention areas can make an important contribution to stormwater management by removing the peak flows and allowing stormwater to drain away once the peak flood waters have receded. Maximising the potential for soakage into the ground is useful, as are roof water collection tanks. The code of practice for subdivision could be amended to encourage greater stormwater management for new developments.

### 5.2. Stormwater Quality

Rainfall landing on urban areas will mobilise a wide range of contaminants — oils and greases from roads and parking areas, litter and urban waste, tiny but significant amounts of metals from roofs and spouting, and an assortment of chemicals and organic matter that wash off hard, impervious surfaces. If the stormwater cannot soak into the ground within a property, it is piped and channelled to the nearest waterway. This could lead to significant deterioration in the quality of the natural waterway. Stormwater from industrial areas can be a particular hazard, but accidental and sometimes deliberate spillages from residential areas can also cause acute pollution problems.

Stormwater and wastewater pipes are often laid underground in close proximity to each other. The potential for both systems to leak, and for stormwater to become contaminated with sewage, is high. This is

particularly the case following an earthquake, as both systems can be damaged by ground movement. Regular monitoring of stormwater outfalls provides useful information on the integrity of both systems

In 2017 a government supported project was initiated by the Council's Environmental Science and Monitoring Department to monitor the water quality of the Taylor River as it passes through Blenheim. The Assets & Services Department opted to undertake a complementary sampling programme of the stormwater outfalls to the river. The outcome of the project helps to guide future decisions on pipe rehabilitation and stormwater treatment.

Many of the existing stormwater outfalls are managed under a range of different resource consents. The Blenheim Stormwater Strategy includes a proposal to consolidate the legacy of consents into a new consent structure that meets both the current and foreseeable standards and reflects the land use plans for the town. This process has taken place for Springlands SMAP and will continue for the remaining 10 stormwater areas in Blenheim and then for the rest of Marlborough.

The most recent sub-divisions on the periphery of Blenheim have included especially designed swales (shallow dished drainage channels), porous water courses and, a wetland to provide treatment of urban run-off through filtration and entrapment of particulate matter. The cost of installation resides with the developer as a condition of Resource Consent, however maintenance, renewal and monitoring will become an on-going operational cost to the Council and included in future budgets. As we gather information and technology in stormwater treatment and retention improves we are flexible in taking a case-by-base approach in

areas of development to ensure our stormwater runoff is not having a negative impact on the mauri of the water.

There are numerous patented treatment systems that can be installed on the reticulation system to intercept contaminants in the urban stormwater. Due to their compact nature they can be an effective treatment for particulate matter to retrofit to existing outfalls.

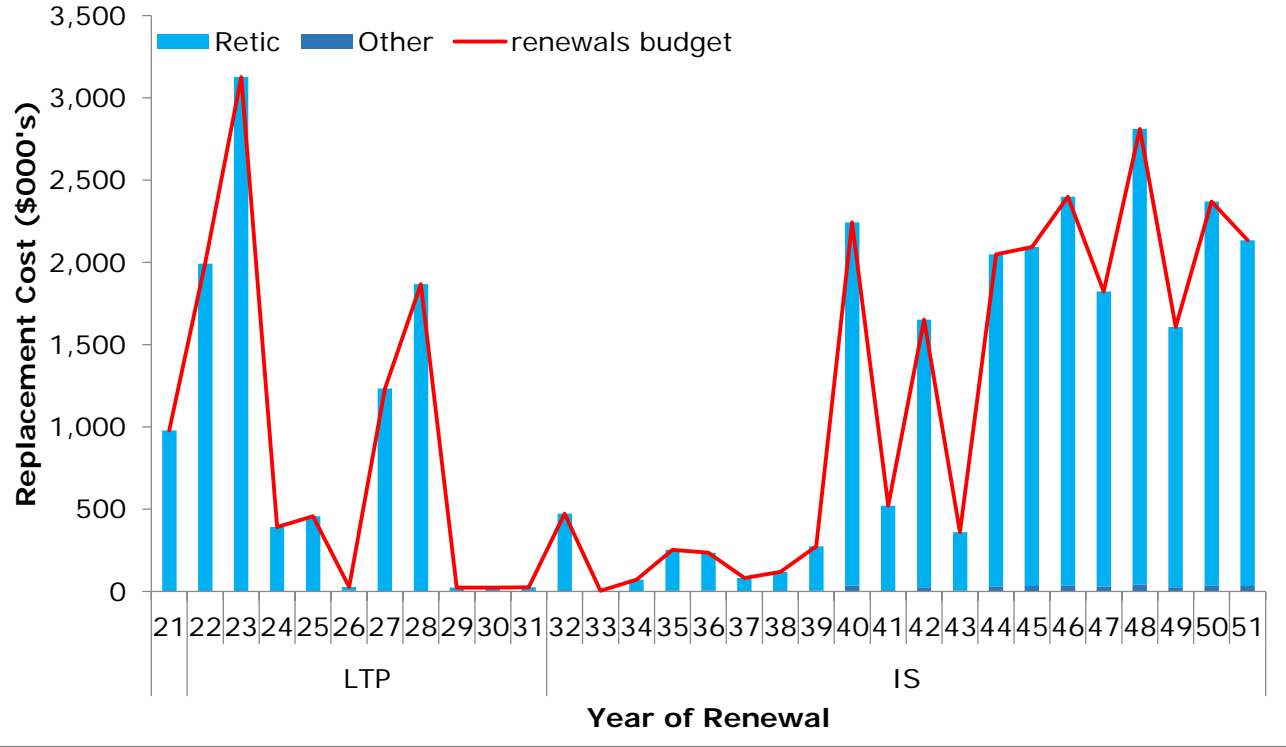
### *5.3. Ageing Infrastructure*

The age profile of the stormwater pipes shows a relatively modest rate of replacement is required over the next 30 years. However, around 48 kilometres of predominantly concrete mains were laid in the 1960s and 70s and these will be reaching the end of their useful around 2050/60, just on the edge of this planning horizon. This spike has been smoothed within the 30 year planning period. In reality, many of these pipes are not critical and will be able to sustain their useful lives being extended and still meeting level of service requirements.

These predictions are based mainly on the current knowledge of pipe condition and the expected rate of deterioration. As discussed previously, many factors influence the life expectancy of pipes. It will be important to gain more knowledge of the pipe condition over the life of this strategy, so the projections can be refined and plans developed for the replacement in a manageable renewals programme. A programme to CCTV survey wastewater and stormwater pipes was instigated following the 2016 earthquake. The survey has been targeted the pipes considered to be most affected (mainly earthenware and vitreous clay) in the areas where most damage is expected (Blenheim) and the pipes that will have the most severe consequence of failure (generally wastewater.)



### Stormwater - Infrastructure Strategy - 30 year renewal profile (\$000's)



6. Options to Respond to Each of These Identified Challenges, and Implications of These Options

6.1. STORMWATER QUANTITY - Increased Stormwater Volumes from Subdivision Development and Climate Change

Option	Implications
Upsize infrastructure to accept maximum anticipated flows at the developers' cost	<p><b>Benefits:</b> Certainty of outcome. Follows the principle of “user pays”.</p> <p><b>Costs:</b> Disruption during the installation and escalating costs of development. Downstream consequences as the receiving waters reach capacity and also require infrastructure upgrades.</p>
Upsize infrastructure to accept maximum anticipated flows and devise funding formula to spread costs.	<p><b>Benefits:</b> Certainty of outcome. Development costs are shared to assist with affordable housing.</p> <p><b>Costs:</b> Disruption during the installation. Inequity as ratepayers fund private developments. Downstream consequences as the receiving waters reach capacity and also require infrastructure upgrades.</p>
<p><b>PREFERRED OPTION</b></p> <p>Implement a combination of engineering interventions as part of an integrated Stormwater Management Area Plan.</p>	<p><b>Benefits:</b> Total and peak discharge volumes are optimised. Minimises infrastructure upgrades and impacts on downstream drainage. Good coordination between urban stormwater and the receiving waters. Forms part of a coordinated river catchment strategy</p> <p><b>Costs:</b> Potentially requires set-aside land for stormwater detention. Significant planning, modelling and engineering design require in advance of development.</p>

6.2. STORMWATER QUALITY – Ensuring Discharge Quality of all Stormwater is not Detrimental to Existing Water Bodies

Option	Implications
<p><b>REQUIRED</b></p> <p>Meet the requirements of the National Policy Statement for Freshwater Management.</p>	<p>Council will continue to identify best practice from around NZ and implement these practices to ensure new developments are ‘future-proofed’ to meet current and anticipated standards.</p> <p>This work will include monitoring current discharge quality and catchment risks and preparing plans for preventative and remedial works.</p>
<p>Status quo. Pro-actively manage potential pollution sources within catchments and respond to pollution incidents as they occur</p>	<p><b>Benefits:</b> No additional costs</p> <p><b>Costs:</b> Derogation of responsibilities under the NPSFW. Fails to address long term low-level contamination from urban run-off. Unable to adequately monitor stormwater impact on the receiving waters</p>
<p><b>PREFERRED OPTION</b></p> <p>Continue to implement a comprehensive Stormwater Management Area Plan including comprehensive stormwater monitoring regime.</p> <p>Install water quality treatment on new developments and retro-fit treatment to existing stormwater reticulation</p>	<p><b>Benefits:</b> Provides good information on the catchment and infrastructure integrity and allows planned remedial works. Proactively protects the receiving water from chronic contamination. Fits with the aims of the Blenheim Stormwater Strategy.</p> <p><b>Costs:</b> Additional costs to new developments. Capital investment in retro-fit treatment. Additional operational &amp; maintenance costs of treatment apparatus. Costs of sampling, laboratory analysis and data interpretation of stormwater outfalls.</p>

### 6.3. AGEING INFRASTRUCTURE – Strategy to Renew Stormwater Networks.

Option	Implications
Renew non-critical mains when failure rates become intolerable.	<p><b>Benefits:</b> Ensures that only pipes that have reached the end of their useful life are replaced.</p> <p><b>Costs:</b> Pipe failure will become apparent during storm events and during likely increases of property flooding. Operation and maintenance costs will increase. Unpredictable renewals make budget and resource planning difficult. Unplanned work is more disruptive and expensive than a planned programme of renewals.</p>
<p><b>PREFERRED OPTION</b></p> <p>Implement a proactive, planned pipe renewals programme and invest more in both condition assessment technology, field data collection and data management.</p>	<p><b>Benefits:</b> Targeted investment in planned renewals works. Smooths the renewals investment profile. Avoids unacceptable deterioration of the level of service,</p> <p><b>Costs:</b> Additional costs of pipe surveying, analysis and data collection to improve pipe and asset condition assessments, to ensure well targeted renewals and efficient investment. Smoothing the renewals profile may accelerate the investment programme if works cannot be deferred.</p>

### 7. Most likely Scenario

The most likely scenario is that the Blenheim Stormwater Strategy will continue to be implemented through the progressive implementation of Stormwater Management Action Plans for the remaining ten management areas. The solutions implemented will be multi-dimensional to the benefit of the urban drainage and receiving waters. The strategic approach will be extended to the other urban settlements (Picton, Havelock, Renwick, Seddon, Spring Creek and other smaller settlements). The aims and

objectives of the strategy, and the holistic approach to catchment management, remains a strong framework for future stormwater management.

### 7.1. and 7.2 Stormwater Quantity and Quality

It is likely there will be an increasing focus on urban stormwater quality and the impact on the natural receiving waters. As a result, there will be a regular stormwater monitoring programme and a programme of remedial works as Stormwater Management Area Plans are developed. It is likely that the remedial works will include:

- increased management of potential contamination sources such as factories, businesses and commercial sites;
- retrofitting treatment devices into stormwater pipelines;
- stormwater treatment to be built into all new development and
- increased efforts to raise public awareness and education.

### 7.3. Ageing Infrastructure

The useful service lives of infrastructure assets are considered annually during the valuation process. Condition data collected through CCTV, planned and reactive maintenance across the network validates this data.

Additional resources will be allocated for pipe condition surveys through CCTV in targeted areas and pipe sampling where maintenance takes place. Data is continually gathered to enhance the targeted renewals programme. It is likely that a small but growing pipe renewals programme will be instigated over the next three years, with accelerated growth in the following years, as more information is gained on pipe condition and life expectancy. Plans will be developed to manage the predicted peak in renewals from 2050.

### 8. Table of Major Projects for this Activity

A brief summary of upcoming projects for this asset is shown below, and includes an indication of the main reasons for the projects. Many of these have multiple drivers that span the challenges identified in the earlier sections of this chapter.

The key 'drivers' of investment are:

- Growth — investment to provide additional capacity to cope with increased demand for the service due to population growth or increased usage

- Levels of service — investment to improve the service customers receive
- Renewals — investment to replace worn out or inefficient assets.

Asset Type	Project	LoS %	Growth %	Renewal %	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030	2030/2031
<b>Combined</b>														
Connections	New Connections		100%		\$0.5M									
<b>Blenheim</b>														
Pipelines	Murphys Creek Pipeline	35%	65%		\$3.7M									
Pipelines	Redwood St - Muller to Stephenson)			100%		\$1M								
Pipelines	Muller Rd stormwater renewal			100%	\$3.6M									
Pipelines	Scott St, Lewis St to Redwood St			100%				\$0.75M						
Pipelines	Stephenson to Stuart St	100%							\$1M					
Pipelines	Graham St - Stephenson - Boys college - Francis St			100%						\$2.5M				
Pump Stations	Water Quality infrastructure for Kinross St	100%			\$0.25M									
<b>Picton</b>														
Pipelines	Pipelines	100%			\$0.29M									
<b>Blenheim, Picton, Renwick</b>														
Pipelines	Pipeline Renewals			100%	\$0.29M									

## Rivers and Flood Protection

For Marlborough to achieve its vision for the future, the infrastructure must be sufficient and functioning; achievable and sustainable with the resources available

### *Flood Protection Goals*

- To manage flood hazard and drainage occurring in more developed areas of Marlborough.
- Requirements in different areas have developed according to the history of flood risks, development of drainage improvements and more recently from development due to land use changes.

### *Introduction*

This chapter covers three activities:

- controlling flood waters from major rivers
- management of drains and small streams which receive the stormwater flowing from the urban stormwater network in Blenheim, Picton and other settlements
- land drainage, which is the steady, longer term removal of water from low-lying rural land.

Since 2010 significant flood events have occurred in most of the region's rivers and streams including the Rai/Pelorus/Wakamarina catchments, outer Sounds catchments, in the wider Picton/Waikawa/Koromiko area, Wither Hills and Southern valleys and the main Wairau River and lower Wairau floodplain. The existing flood systems have generally coped well with these events.

The Wairau floodplain's major rivers and stop-banked floodways cover 20,000 hectares of fertile land around Blenheim, and is the Council's major river control and drainage activity. A review of the Wairau flood protection and drainage works is scheduled for completion in 2024 and this will take into account land use changes over the past 25 years as well as the predicted impacts of climate change.

### *Expectations of higher standards for flood protection and environmental values*

There is a trend for ratepayers to expect that Council will provide a high standard of flood control and drainage throughout Marlborough. The Building Act 2004 and the Resource Management Act 1991 (RMA) also oblige councils to take a more active role in managing flood risks than was required under earlier legislation.

New river control assets may be required for several reasons:

- areas that would like to benefit from flood protection and are prepared to meet the costs can request this service from the Council
- land development increases the flood runoff from the land
- increased awareness of flood risks as a result of climate change and/or better hydrological flood records

The long history of flood control and drainage on the lower Wairau floodplain initially had an emphasis on risk management and affordability. However, over recent years the issues involved in river control and drainage have become more complex. Much more regard must now be given to maintaining and enhancing ecological values to meet the requirements of the Resource Management Act (RMA), the National Policy Statement on Freshwater Management (NPSFM) and the New Zealand Coastal Policy Statement (NZCPS).

The Council is committed to maintaining high environmental standards for its flood protection activities, particularly as there are many valuable and sensitive ecological sites in the region. Maintaining and enhancing riparian ecological habitats, including whitebait spawning areas and bird nesting habitat, is also necessary.

## 9. Specific challenges

### 9.3. Levels of Service and Increasing Demand for Flood Protection

#### Blenheim Stormwater Outfall Upgrades

Ongoing development of Blenheim including infill housing and expansion into the recently rezoned areas to the north and west requires upgrade of the stormwater system, including the outfall channels and pump stations.

Work continues on the design and construction of upgrades for the Redwood Street catchment (Town Branch drain, Redwood Street and Snowdens pond and additional pumping), Murphys Creek and Fultons Creek upgrades (Boyce Street stormwater diversion main, Parker Street stop banking), Blenheim west (Camerons Creek capacity and environmental issues).

#### Maintaining the Wairau River Alignment

The stopbanked reach of the Wairau River downstream from the Waihopai confluence has very powerful and erosive river flows. Bank protection in the form of rock rip-rap armouring and tree planting is required to protect the stopbanks from erosion, especially as a result of floods.

Regular asset inspections have confirmed the need for continued investment in new works and regular maintenance of existing works to ensure a robust flood protection system is in place. Ongoing maintenance and upgrade work is required downstream to both the Diversion and Wairau river mouths. This includes permanent repair at Wratts Road following emergency work in December 2019.

A key project for this plan is six new and strengthened heavy rock groynes and up to 1.4km of stopbank realignment over the 3.5km reach from the Southern Valleys irrigation intake down to Upper Condors. The aim of this work is to maintain the river alignment and so ensure the security of the adjacent stopbank and irrigation intake infrastructure.

#### Stopbank Upgrades

Ongoing stopbank upgrades are planned for the Taylor River through Blenheim, lower Opawa River and lower Wairau River. The stopbanks

upgrades are to bring older sections of stopbank to current structural standards, to provide agreed flood capacity and through Blenheim where possible shift sections of stopbank from private property into the Taylor River reserve. Likely climate change impacts will be included in upgrade designs where appropriate.

#### Stormwater Flows in Blenheim and Picton and the effects of new Urban Development

The Building Act 2004 requires the floors of new buildings to be protected in a 1 in 50 year return period flood event. The main challenge related to urban areas is to ensure that the system of drains, natural watercourses, pumping stations, and floodgates can adequately cope with the stormwater runoff that occurs in a 1 in 50 year return period flood.

This level of protection from stormwater flows is being achieved for many, but not all of the dozen watercourses in Blenheim and Picton.

Residential, industrial and commercial development is resulting in more impermeable (hard) surfaces, which reduces absorption of rain by land and increases the amount of rainfall runoff into the small rivers, streams and drains via stormwater pipes. This is occurring in all urban areas, especially Blenheim, Picton, and Renwick. The Riverland's industrial area is also expanding rapidly, and includes the rezoning of rural land to industrial zoning.

#### Wairau Land Drainage Areas and land Use Changes

The Wairau drainage area covers 8,000 hectares of low lying floodplain, which is drained by 200 km of minor watercourses and 18 pumping stations. This land is to the east of Blenheim and O'Dwyers Road. The Council is committed to avoiding more than 2-3 days of ponding occurring in paddocks in these drainage areas.

The drainage system consists of a mix of deliberately excavated drains and natural watercourses with floodgated culverts into the major rivers, and a series of pumping stations.

The current drainage network was last formally reviewed in 2015. This review recognised there has been significant intensification of land use

and subdivision, a trend towards viticulture and an expectation of a generally high level of service since the Wairau Scheme was established in 1960.

An extra 15.3km was included in the managed network of drains following the 2015 review. This provides a drainage outfall to all rural land parcels greater than 1 hectare within the Lower Wairau Drainage Scheme area.

60% of the land within the Lower Wairau designated floodway is owned by the Council while 40% remains private ownership. Private land owners are required to use the land in ways that are compatible with floodway management. As viticulture land becomes more scarce there are likely to be further requests to plant private land within key Wairau floodways (especially the Opawa, Wairau and Taylor River floodways), and requests for inclusion of these areas within the 1 in 100 year standard of the Wairau floodplain. Where 'compatibility' cannot be agreed there is a land purchase budget each year for acquisition of private land. The budget has not increased.

Viticulture is progressing westwards up the Wairau Valley. Land above the Waihopai confluence has a lower standard of flood protection. A rate review within the term of the Infrastructure Strategy may see further requests for an increased level of service in the upper Wairau Valley. The strategy assumes that the current level of service remains materially unchanged and the rate review will align the funding and service levels.

Most adjacent vineyard owners above the Waihopai confluence have now recognised that it is in their interest to leave an adequate fairway to provide for flood capacity and to undertake edge protection works, which are typically some combination of rock and willow planting to provide a good buffer between the active channel and productive vineyards. Accordingly, since the floods of 2011 and 2012 Council has assisted some property owners with the design and construction of new works, with the works to be owned by the landowner.

Vineyard developments also appear to be causing increased runoff on the gently sloping, moderately impermeable land of the southern valleys to the south of New Renwick road and State Highway 63 to the west of Renwick.

This will need to be managed with larger culvert sizes and increased maintenance of the drainage channels.

#### *9.4. Environmental expectations*

##### *Weed Control*

The blocking of drainage and stormwater channels by thick aquatic and terrestrial weeds is a major maintenance issue. Weed growth can reduce the hydraulic performance of the channels by a factor of 10 reducing the drainage efficiency and increasing the flood risk to nearby properties. Regular annual removal using herbicide or by excavation is essential.

The spread and extent of weed is increasing and new weeds regularly arrive in Marlborough. Conversely there is an increasing expectation from the public of more weed removal and there is generally increasing environmental (resource consent) constraints on the manner in which aquatic weed removal is carried out.

The use of the herbicides is a key tool for maintaining both the drainage network and a number of key streams infested with aquatic weed. The current resource consent to use herbicide in and near waterways expires in February 2019.

##### *Impacts of Flood Gates on fish Migration*

A total of 249 gravity outlets have been installed under river stopbanks. Simple floodgates (or flap valves) are constructed on the outlet of these culverts to prevent water flowing back from the river. These floodgates, while essential for preventing the backflow of floodwater, adversely affect movement of whitebait and other fish into the drainage network.

##### *Pukaka Quarry Extension*

The Council owned Pukaka Quarry is a key source of rock rip-rap for river protection works on the Wairau River and tributaries, and clay for stopbank upgrades and repairs. The quarry also supplies a variety of aggregates to the contracting market as a by-product of the rock production.

The rock resource within the existing land boundary is now very limited and further land is required if the quarry is going to continue for a further

40 plus years. Negotiations for purchase of the additional land are essentially complete and an application for the necessary statutory approvals will be lodged shortly.

This plan makes provision for the land purchase and initial capital development of the quarry extension. The Pukaka Quarry is self-funding and capital requirements for the extension are proposed to be serviced from operating revenue.

### 9.5. Climate Change

#### Managing the Impact of coastal Storm Waves and Sea Level Rise on Drainage

The lower Wairau Floodplain includes several thousand hectares which are less than 2 metres above sea level.

Sea level rise will impact on coastal erosion and drainage of this low-lying farm land. Average sea levels are predicted to rise by 0.3 m by 2050, which will impact on drainage gravity outfalls and require more pumping, alter general water table levels and may increase saline intrusion in the very low-lying areas. Sea level rise is also likely to lead to an increase in wave lap type erosion in the lower reaches of the Wairau and Opawa Rivers.

The marine storm wave forces are a very important factor. In the past they have formed a sand bar, typically extending a kilometre to the north. The bar is formed by a combination of marine forces, tidal flows into the Vernon Lagoons and river flows from the lower Wairau and to a lesser extent the lower Opawa. A training groyne at the mouth of the Wairau River has helped to maintain an open channel to the sea and scour any sand accumulation. There is some evidence of increased accretion at the mouth of the Lower Opawa. The situation continues to be monitored and may require additional dredging. If required, dredging will be a significant maintenance cost.

#### Potential Impacts of Climate Change on Flood Flows

Climate change will also alter the frequency and severity of flood events. Current advice to Council is that by 2050 a given 100 year or 1% AEP flood will increase in size by 10 – 15%. That means the current 5500 cubic

metres per second (cumecs) Wairau flood could increase to over 6000 cumecs. However, flood flows are likely to be variable — in some catchments they may actually decrease, while increasing in other areas.

The various scenarios will be investigated through a detailed technical review which commenced in 2019. The potential effects on levels of service and options will be presented to the Council for consideration (see options below).

### 9.6. Legislation

#### Dam Upgrades

The Taylor flood detention dam is about 55 years old and is generally in very good condition. However, a comprehensive safety review in 2013 identified a number of matters for Council to attend to, including a minor capacity upgrade to the auxiliary spillway, installation of additional drainage and crest level monitoring points, and resealing of the main outlet culvert joints. Immediate maintenance items have been completed and now investigation of the spillway upgrade options is nearing completion. These will be reported to Council in due course.

Similar refurbishment work is also required on the Gibson’s Creek Waihopai intake.

### 10. Options and Implication

#### 10.3. Levels of Service and increasing Demand for flood Protection

##### Level of flood protection for the Wairau floodplains

Option to address it	Implications of the options (financial and non-financial)
<p>PREFERRED OPTION</p> <p>Maintain and upgrade the floodways passing across the main Wairau floodplain to provide a</p>	<p><b>Benefits:</b> Recognises agreements reached through the Wairau Rivers Floodway Management Plan in 1994.</p> <p>Certainty that building and land use planning can proceed to an agreed standard.</p>



Option to address it	Implications of the options (financial and non-financial)
capacity for flood sizes of up to a 1 in 100 year return period for the Wairau river and other major floodplain rivers of the Lower Wairau, Wairau Diversion, Opawa, Taylor, Omaka, Riverlands Co-op and others.	<p><b>Costs:</b> Financial costs of ongoing upgrades outline budget to 2028 of \$10.5M.</p> <p>Environmental impacts of river control works.</p>
Maintain the existing level of protection, but do not increase the level of protection to meet a 1 in 100 year return period if the magnitude of floods increases as a result of climate change.	<p><b>Benefits:</b> Avoids the need for flood protection upgrade works.</p> <p><b>Costs:</b> Community consultation and consent required.</p> <p>Uncertainty as to level of flood protection and risks.</p> <p>Damage to property and crops.</p> <p>Possible reputational damage.</p>

#### Lower levels of flood protection – Kent Street tributary, Picton

Option to address it	Implications of the options (financial and non-financial)
Preferred Option Status Quo Undertake minor improvements to culverts to improve flow but accept additional flood	<p><b>Benefits:</b> <i>No significant upgrade work</i></p> <p>Cost savings if culvert construction and reinstatement can be coordinated with port refurbishment.</p> <p>Helps manage rate increases.</p> <p><b>Costs:</b> Properties exposed to increased</p>

Option to address it	Implications of the options (financial and non-financial)
hazard as culverts can achieve only around 60%-70% of 100 year flood flow.  Defer the culvert upgrade until works can be coordinated with Kiwi Rail/Port Marlborough upgrades to port	<p>flood risk.</p> <p>Additional cost to new development of increased floor levels due to lower level of flood protection</p>
Upgrade culverts at earliest convenience	<p><b>Benefits:</b> Improved flood protection for properties in Waitohi Stream catchment.</p> <p><b>Costs:</b> Cost to undertake works and restore port facilities estimated to be in excess of \$10M.</p>

#### Wairau land drainage areas and land use changes

Options to address it	Implications of the options (financial and non-financial)
Further extend the land drainage areas on an adhoc basis when requested to do so by landowners.	<p><b>Benefits:</b> Responds to land use changes in a timely way.</p> <p><b>Costs:</b> Doesn't provide for integrated solutions within a catchment.</p> <p>Difficult to implement a fair cost recovery plan</p>
Preferred Option Scheduled land drainage reviews, to consider extensions of the land drainage area	<p><b>Benefits:</b> Managed and cost-effective approach for Council.</p> <p>Increased land productivity and subsequent indirect benefits to the region</p>

Options to address it	Implications of the options (financial and non-financial)
integrated with rate review.	from greater flood protection <b>Costs:</b> All costs to borne by benefitting properties through the classified rate.

#### 10.4. Environmental Expectations

##### Weed Control

Options to address it	Implications of the options (financial and non-financial)
Use of herbicide	<b>Benefits:</b> Cost-effective. Manual clearance is between 6 and 10 times more expensive than herbicide. Costs are likely to increase as landowners demand improved disposal of cleared weeds. Gradual die-back of targeted weeds has less impact on native flora and fauna. <b>Costs:</b> Additional cost of environmental impact monitoring of herbicides on aquatic life. Ensure safe working practices are employed. Possible but unknown environmental effects of chemical residues.
Manual clearance	<b>Benefits:</b> A conventional mechanical removal system with known environmental impacts <b>Costs:</b> Disturbance of river and stream beds, and impacts from sedimentation. More expensive. Damage to stream profile leading to increased 'canalisation.'

#### 10.5. Climate Change

##### Managing the Impact of Coastal Storm Waves and Sea Level Rise on Drainage

Options to address it	Implications of the options (financial and non-financial)
Pro-actively upgrade wave-lap erosion control measures and prepare plans for up to three additional drainage pump stations.	<b>Benefits:</b> Retain the current level of service for flood protection and land drainage. Reduced storm damage remedial costs. Planning preparation for sea-level rise but physical works deferred until greater clarity on the extent of climate change effects. <b>Costs:</b> Capital costs to be determined following the review.
React to storm wave damage only	<b>Benefits:</b> Avoids capital costs of upgrades. <b>Costs:</b> Additional damage to wave band protection and adjacent land. Additional remedial costs and maintenance. Loss of some existing land uses over time.

##### Potential Impacts of Climate Change on Flood Flows

Options to address it	Implications of the options (financial and non-financial)
<b>PREFERRED OPTION</b> Undertake a comprehensive review of the Lower Wairau Flood Protection Scheme including climate change	<b>Benefits:</b> Community involvement in decision-making. Retains ability to adapt to changes over time. Include the most recent climate change projections and high quality hydraulic modelling. Decision making using high quality information. <b>Costs:</b> Consultancy costs to perform analysis and modelling. Potential delay in

Options to address it	Implications of the options (financial and non-financial)
scenarios and to consult with the community on both the desired levels of flood protection and their willingness to pay.	decision making. Financial and practical resources will be required for monitoring and for adaptation to changing flood flows and frequencies of flood events.
Accept lower levels of flood protection over time in areas where climate change increases the magnitude and frequency of flood events.	<p><b>Benefits:</b> Recognises ongoing and increasing nature of climate change.</p> <p><b>Costs:</b> Flood damage to private property and public infrastructure. Loss of some existing land uses over time. Costs of managed retreat. Possible reputational damage from flood damage.</p>

### 11. Most Likely Scenario

Council will review the core Wairau River Floodway Management Plan, and take climate change into account as well as the 25 plus years of additional flow data records collected since the plan was originally prepared. Once the flood risk data has been updated the Council will undertake a major public consultation exercise with the key stakeholders on an updated plan for the key Wairau works through to 2050. The objective is to gain more understanding of the desired level of service and willingness to pay for future flood protection works.

The current thinking is that relatively minor upgrades will be required to preserve existing levels of service to about 2050 but after that time other options, including accepting increased flood risk or retreat from some very low lying areas, may need to be considered.

This plan is likely to be implemented through a range of activities including building and maintaining stopbanks, river diversions, detention dams, stopbank erosion protection (rock and trees), river channel clearing, channel excavation, channel training, and use of flow control gates.

A climate change allowance is already built into all current Blenheim stormwater design and planning. The flood risk associated with the Picton rivers was recently reviewed, following the very large Waitohi and Waikawa River floods in 2004.

In Picton, further upgrade of the Waitohi triple culverts will be required to meet the desired 50 year flood standard. This work can only be cost effectively completed if it can be fitted in with upgrade plans within the KiwiRail shunting yard and Interislander parking area. No funding has been included in this plan to date as the feasibility and cost benefit of any work is still to be determined.

In the interim, the flood hazard risks in the Dublin Street area and adjacent to the Kent Street drain (Buller Street branch), will be identified in the Council's hazard register, with some building restrictions applying to this area (mainly minimum floor levels).

Over the longer term, further investigation of upgrading costs and also of possible funding sources for these upgrades is required as a part of the planned review of the Wairau River Floodway Management Plan followed by discussion with the affected community.

### 12. Major Projects For This Activity

A brief summary of upcoming projects for this asset is shown below, and includes an indication of the main reasons for the projects. Many of these have multiple drivers that span the challenges identified in the earlier sections of this chapter.

Asset Type Description	Your Description	Growth %	LoS %	Renewal %	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030	2030/2031	
<b>Blenheim</b>															
Pump Stations	New Pump stations	100%			\$0.72M										
Drainage Channels	Town Branch Drain Upgrades		100%		\$6M										
<b>Opaoa</b>															
Stopbanks	Stopbanks		100%		\$1.3M										
Stopbanks	Waipuna St			100%					\$0.8M						
<b>Wairau</b>															
Stopbanks	Lower Wairau Stopbanks			100%		\$0.45 M					\$0.7M				
Rock & Gabion Protection	Edge works		100%		\$8.3M										
<b>Omaka</b>															
Stopbanks	Stopbank upgrades			100%						\$0.6M					
<b>Quarry</b>															
Land	Land purchase	100%			\$1.8M										
<b>Ruakanakana</b>															
Drainage Channels	Lower terrace upgrade	100%							\$0.8M						
<b>Rural</b>															
Pump Stations	Pump stations		100%		\$1M										
<b>Taylor</b>															
Dams	Taylor Dam			100%	\$0.05 M					\$0.5M					

### Community Facilities

For Marlborough to achieve its vision for the future the infrastructure must be sufficient and functioning at the same time as being achievable and sustainable with the resources available.

### Community Facility Goals

- Enhance the quality of the environment through the establishment and maintenance of reserves, parks, open spaces, libraries, museums, cemeteries, public conveniences, halls, trees etc.
- Promote quality lifestyles and the desirability of Marlborough as a place to live and visit.

- Provide a wide range of opportunities and facilities for recreation from passive through to active.
- Invest in and planning for infrastructure to meet social and economic wellbeing and health of our communities.

### *Introduction*

Council has included Community Facilities within the infrastructure strategy. There is no statutory requirement to do so in the Local Government Amendment Act of 2014. However the infrastructure that contributes to community facilities has been included that has a reasonably significant value both in terms of their financial value and their contribution to community wellbeing. There are also many smaller assets that individually are less valuable but when grouped together are significant. The asset groups included are sports stadia, community halls, libraries, cemeteries and memorials, playgrounds and public conveniences.

The assets included in Community Facilities are quite diverse in the nature of the service they provide and spatial location around the region. Whilst they are subject to many of the key themes of the strategy some services provided are of a more discretionary nature.

Marlborough has an increasingly ageing population while at the same time becoming more ethnically diverse. As a population ages, sporting participation preferences are likely to change. Generally speaking, older residents do not participate in higher levels of moderate to vigorous physical activity. Another significant change is many older adults have the ability to recreate during week days, which is often a period of time where sporting facilities are underutilised. The increasingly ethnic diverse profile of Marlborough also brings opportunities for residents to participate in a more diverse range of activities. This diversity may place additional pressure on the Council to provide facilities for a wider range of activities as they emerge.

The **affordability of renewals** may also be a challenge for some groups of assets, particularly if there is a demand for an improved **level of service** from the replacement. Although there are some newer facilities in the district, the network of sporting facilities is generally ageing. The

Council has looked at increased investment in the network recently, including the development of the Endeavour Sports Hub and the new hard courts and sports hub at Lansdowne Park. The new Picton Library and the one under construction for Blenheim include a degree of upgrade to meet an increased level of service demanded by customers.

Demand for public services can also decline over time. Technological changes, changing trends and personal choices about activities people take part in and how they take part in can result in facilities being underutilised. Similarly it has been assumed that the various community halls will not be replaced when they reach the end of their useful life. Money has not been collected to fund their depreciation and renewal affordability could be a challenge. It is therefore important that facilities can adapt to meet changing needs and are sustainable, including financially.

**Climate change and resilience** to natural hazards may also impact on some of the groups of community facilities. For example coastal tracks and coastal reserves may be subject to increased storms, rising sea-level and the effects of tsunamis. There will need to be some modifications to sports facilities to maintain them through more severe weather events – drought resistant turf, irrigation and improved drainage. These are likely to be resolved through incremental changes that can be incorporated into operational management plans with lower financial impact.

### *Recreational Facilities*

The underlying story for sports and recreational facilities, parks and reserves is that the major influences of change over the next thirty years are not likely to have a shock impact that will require major capital investment. Change is likely to be gradual and at least partially compensated by other contemporary changes. The other prevailing trend is that while levels of service may alter with changing community demands and operating environment ~~but~~ the overall standards are unlikely to decline. If this projection is correct the operational and maintenance costs will be at least comparable with current expenditure.

The major sports stadia in Marlborough - Stadium 2000 and Blenheim swimming pool, the Giesen Renwick sports centre, Picton Endeavour Park Pavilion and the Lansdowne Park sports hub in Blenheim have a combined insurance value of \$48.4 million. There are a further 23 sports and leisure facilities with total value of \$23.4 million. The major stadia are relatively new and have a long life expectancy. The Sports Facilities Strategic Plan 2021 has been developed to understand the current and future facility needs and aspirations of sporting codes in Marlborough. The plan identifies what changes, updates or additions could be made to the Council's sports facilities network over the next ten years. To date sharing of common facilities and synergies between codes helps to promote sports, save costs and future-proof the facilities to meet changes in community demand.

Stadium 2000 has undergone strengthening works to improve its resilience to earthquake as have other of the Council's community facilities. It is important to note that the main aim of building strengthening is prevent catastrophic failure and to allow people to escape. It does not mean the facility will be serviceable after a large earthquake. The Council has insurance to help manage the risk but the insurance excess can still be considerable.

### *Community Halls*

There are around 16 community halls located in many of the small settlements from D'Urville Island to Ward. Many of them are old but are still a significant focus for the community. Many are in rural locations that are predicted to have declining populations in the future.

Many of the halls have an important role to play as the only public facility available in isolated communities. They may have limited use but they have strong cultural and nostalgic linkages to the community. Some are more valued for their heritage and future potential as much as their current practical utility. Six have been identified as Civil Defence Community Response Centres.

Council policy is not to fund depreciation of the community halls and an assortment of management practices have evolved by individual communities. Not all structures have been assessed for earthquake

resilience. Strengthening works would need to be incorporated into a cohesive management plan.

### *Parks and Reserves*

The Council has three premier parks (Pollard Park, Seymour Square and Picton Foreshore) and around 79 neighbourhood parks. The premier parks not only provide a service for the local community but, increasingly, an attraction for visitors. Neighbourhood parks provide playground areas which are likely to become more frequented as property section sizes decrease. For these reasons the level of service for these assets is likely to be maintained into the foreseeable future.

### *Other Facilities*

Similarly walkways, cycleways and public conveniences are increasingly used by visitors to the area. Tourism is an important and growing part of the economy. There will be continuing demand to expand and upgrade the facilities provided and maintain a high level of service for the benefit of local community and visitors.

### *Libraries*

The new libraries in Picton and Blenheim will be in modern buildings designed to the latest standards with updated fittings and facilities. The main infrastructure is designed and built to last beyond the 30 year strategy but advances in technology may make some of the facilities obsolete or require significant re-investment. It is difficult to predict the implications of new technology but the strategy ensures the new structures are as flexible as possible to adapt to changing service requirements in a way that will allow the long term durability of the assets.

### *Museums and Cultural Facilities*

The main Marlborough museum is located at Brayshaw Park and several smaller museums and art galleries at Havelock, Renwick, Picton, etc. A new art gallery will also form part of the new Blenheim Library complex. There is unlikely to be a major shift in the strategic management of these facilities. However, a change in level of service may be anticipated to embrace modern technology. Museum visitors

now expect inter-active displays and high quality presentation materials. Conversion of archive material to digital formats and other operational costs can be expected. The smaller facilities may face premature technical obsolescence or expensive upgrade.

The cultural significance of the Wairau Bar settlement in New Zealand history is becoming more apparent as more archaeological evidence is discovered. There may be increasing pressure for investment in a permanent facility to recognise and display the artefacts for the site.

### *Cemeteries and Memorials*

The Council administers eight cemeteries with a combined area of around 26 hectares. Population projections show the proportion of the population over 65 is likely to increase from its current level of around 20% to 35%. Increased demand for burial space may require additional land purchases and development investment and operational costs. However there is evidence of a trend towards greater cremation. The introduction of the Cemeteries Bylaw in 2017 has provided the option to pre-purchase up to two cemetery plots per application. Management plans have been developed for all of the cemeteries to assist future

planning. Changes are expected to be accommodated without significant investment aside from a need to consider the purchase of additional land.

The community expect cemeteries and memorials to be maintained to a high standard. Deterioration to this level of service is unlikely to be acceptable.

### *Options and Implications*

An options and implications table has not been included for Community Facilities.

Relatively small changes will be gradually deployed to implement further upgrades and meet changes in demand. The new infrastructure that has recently been completed or is under construction - libraries and sports hubs - has been deliberately designed to be as flexible as possible. Changing demand patterns, demographics of the community and new technologies can be accommodated in the structures that are planned or have been completed.

Project title	Approximate date required	Estimated cost \$m	Reason for project	(% weighting)	
			Growth	Level of Service	Renewal
Blenheim Library Renewal	2021-22	\$14.5M	0%	20%	80%
Lansdowne Park Hub Upgrade	2018-20	\$5.2M	20%	80%	0
Awatere Community Hall	2018-19	\$2.8M	0	0	100%
Blenheim A&P Park Pavilion	2019/20	\$1.5M	0	10%	90%

Early discussions have been initiated on Top Of The South centres of excellence that may result in major infrastructure being developed between Marlborough, Nelson & Tasman. There is insufficient progress on this initiative to include details at this stage.

## General Assumptions and Risks

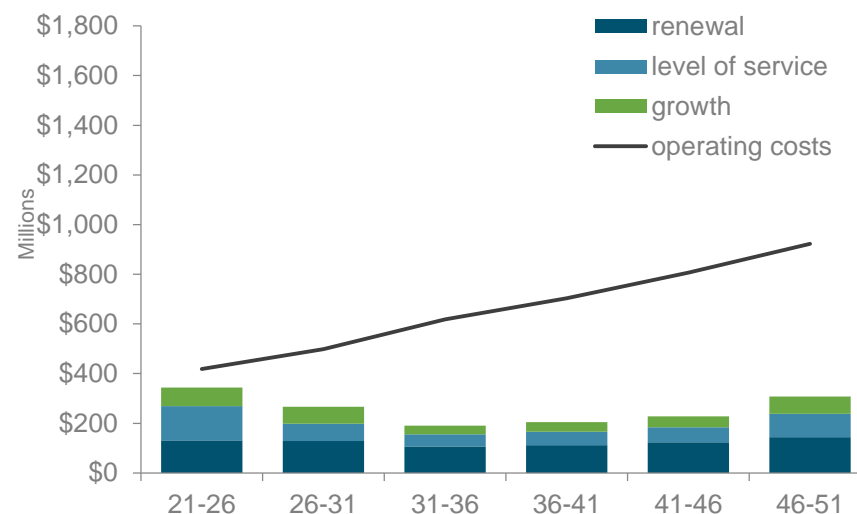
Made in preparing financial information (generally up to years 11 to 30):

1. Capitalised overheads have been added to capital spending in years 11 to 30 at the average rate they are applied in the budget ten years, by Activity.
2. The capital inflation rate applied to years 11 to 30 is BERL's forecast LGCIC for the year ending June 2031 i.e. 2.74%
3. Additional operating costs, including insurance and depreciation, have been estimated in relation to growth and level of service related capital projects in years 11 to 30.
4. For renewals capital expenditure in years 11 to 30 it has been assumed that any additional costs will be more than offset by a reduction in related maintenance and no operating costs adjustment has been made; this probably leads to an immaterial overstatement of operating costs towards the end of the planning horizon.
5. The renewals expected based on the estimated useful life of current and planned assets have been forecast to utilise availability of operational and financial resources; renewals have generally not been forecast earlier than the engineering trigger point.

## Part Three — Financial Summary

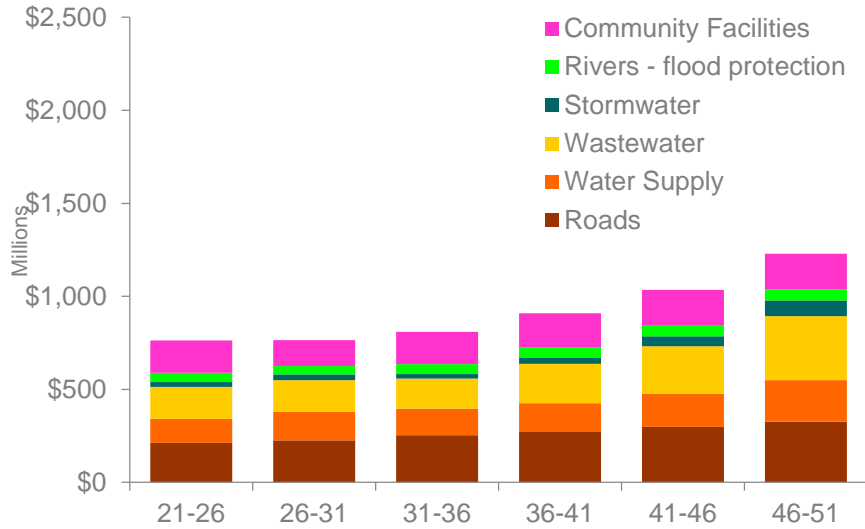
The capital work presented in section two represents total infrastructural capital spending of \$853 Million over the next 30 years; with associated operating expenditure totalling \$3.007 Billion – to operate and maintain existing and new infrastructural assets. The operating expenditure is spread fairly evenly across the years whereas the capital expenditure is more concentrated in the early years.

### Infrastructure Spending: not inflated





### Combined Infrastructure CAPEX and OPEX: Not



The preceding chart shows the total infrastructural spending (capital and operating combined) by Activity Group.

Given the constant challenge to provide the required services in an affordable manner, and the demand on internal and external project management and construction resources, the renewals expenditure based on expected useful life has been budgeted to “fill the gaps” between the major projects.

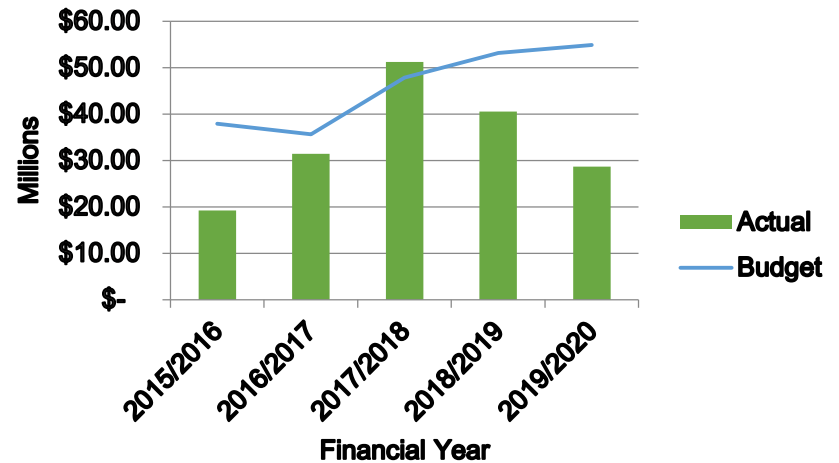
In preparing its LTP Council has to inflate the project cost estimates, also added into the budget are approximately \$1.0 Million of Planning and Development costs which will be capitalised. The same methodology has been applied throughout the thirty years of this financial summary.

Preparing the LTP and this financial summary also involved consideration of factors which may delay the proposed timing of projects and have a significant impact on the overall capital programme.

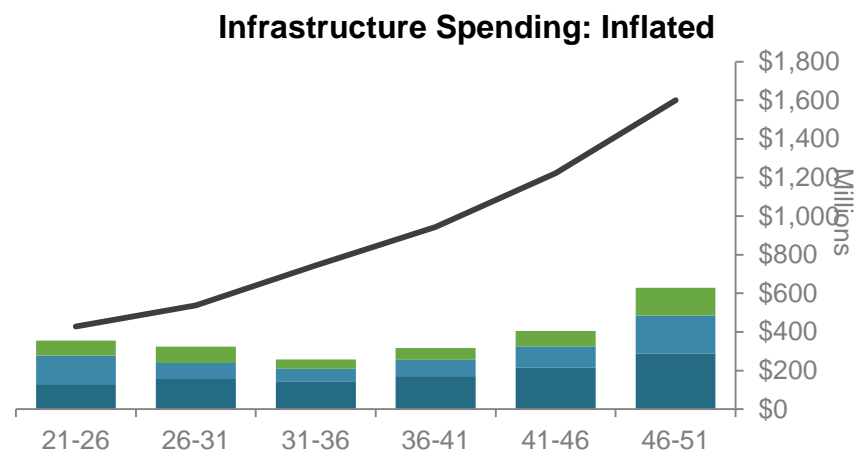
Over the past five years actual Capital Expenditure has ranged from \$19.21 Million in 2016 to \$51.25 Million in 202018 with an average of \$34.2 Million, the projection for 2020/2021 is over \$64.7 Million. In all but 2018, the actual spending was below budget, often significantly. Capital project timing has been delayed due to:

- finalising community consultation;
- obtaining land access;
- obtaining resource consents;
- the availability of external professional expertise;
- receiving acceptable contract price and contractor availability.

### CAPEX Budget vs Actual



As described throughout the strategy there are many projects and some demand for improved services from all of the core activities. However it is unlikely that projects will rapidly overcome the obstacles described and accelerate much beyond an annual expenditure of \$71M. It has therefore been decided to limit capital financing to \$71M per annum for the first three years of the LTP.



The resulting “inflated” budget is for total capital expenditure of \$1.14 Billion and operating expenditure totalling \$4.6 Billion. The inflated capital spending is:

- 13% to service forecast growth
- 19% to improve levels of service (strongly influenced by wastewater and also by water supply)
- 67% to renew assets as they reach the end of their lives.

Council’s Financial Strategy sets out the strategic financial direction; the external and internal factors expected to have a significant impact (in particular over the next ten years); and the approaches used to fund this scenario in a prudent manner.

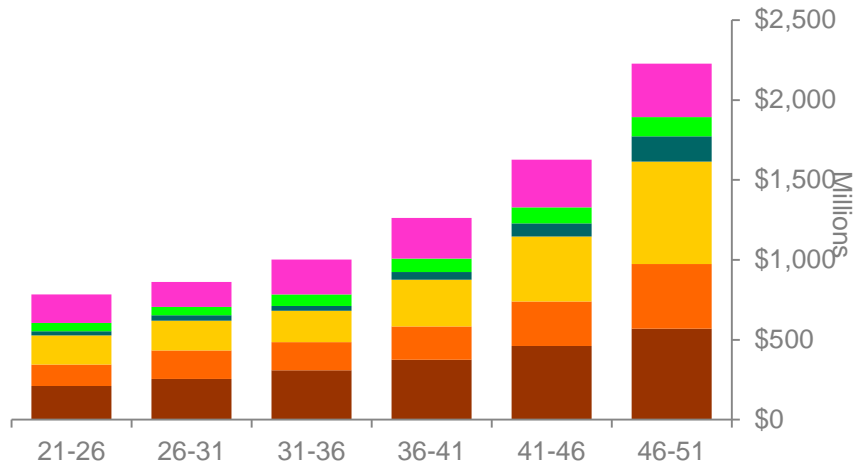
The strategy identifies that in general:

- growth driven capital expenditure is funded by Development Contributions
- capital expenditure to increase levels of service, e.g. improve quality of drinking water supply, is funded by borrowing
- renewals capital expenditure is funded from revenue - rates and charges - set to recover depreciation expense, and accumulated until spent. This funding source emphasises the importance to Council of continually fully funding depreciation on infrastructural assets.

As we move beyond the Financial Strategy and into the later 15 years of this Infrastructure Strategy the focus of capital expenditure is forecast to move to renewals.

In practice any funds available are used before new loans are drawn down, to avoid paying interest unnecessarily; excepting Development Contributions which are only ever used to fund growth projects.

### Combined Infrastructure CAPEX and OPEX: Inflated



### Activity Graphs

The following graphs show, for each Activity:

Budgeted expenditure over the next ten years, i.e. as included in the LTP, year by year:

- Inflated
- Not inflated

With the same scale for both graphs

Forecast expenditure over the next thirty years, taking the first ten years from the LTP and showing spending in five year blocks:

- Inflated
- Not inflated

With the same scale for both graphs

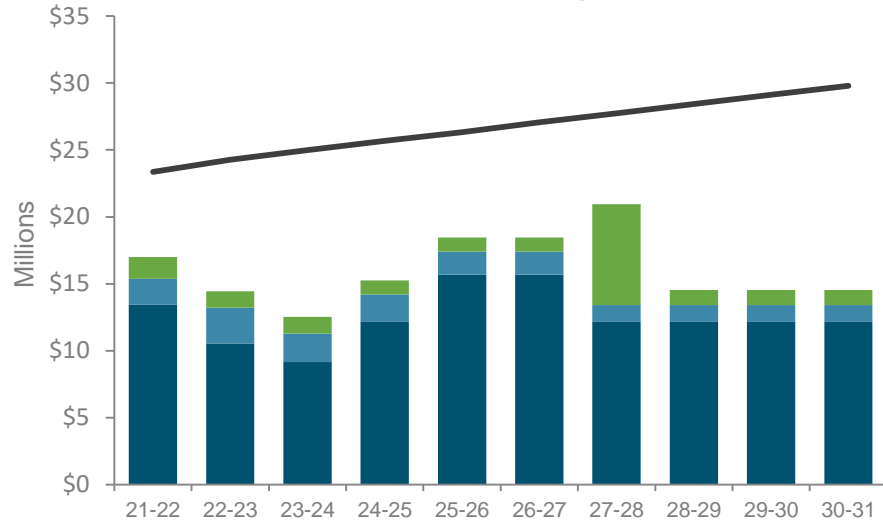
All graphs show:

- Total operating expenditure
- Capital expenditure separately identifying renewals, growth driven and level of service driven expenditure

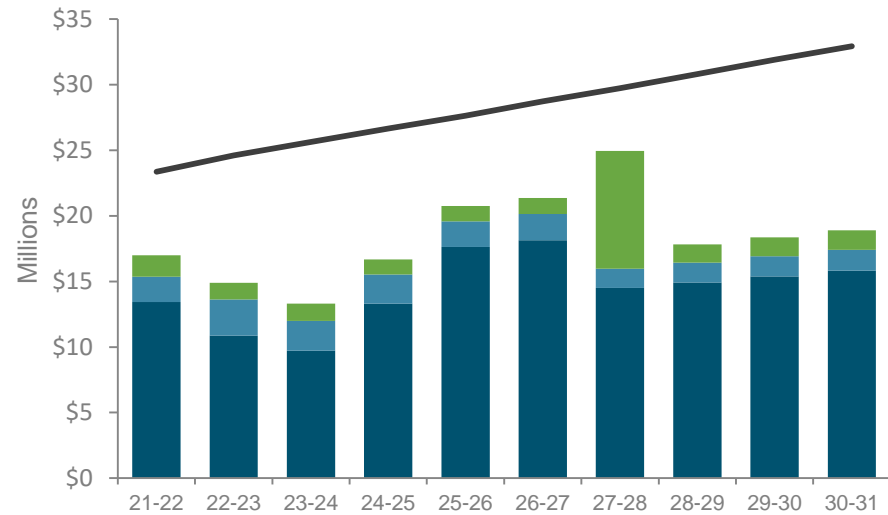
Key:	
Capex to:	
cater for growth	
increase level of service	
renew existing assets	
Total operating expenditure	

# Roading

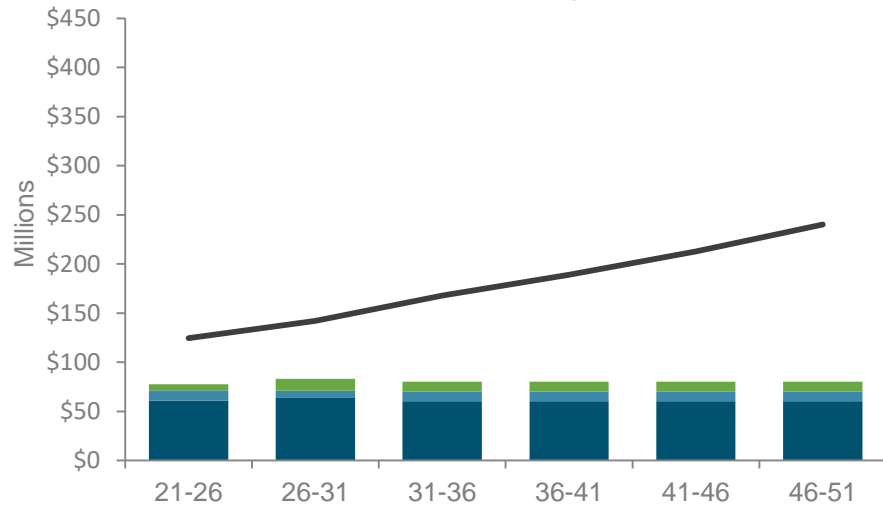
**next ten years spending not inflated**



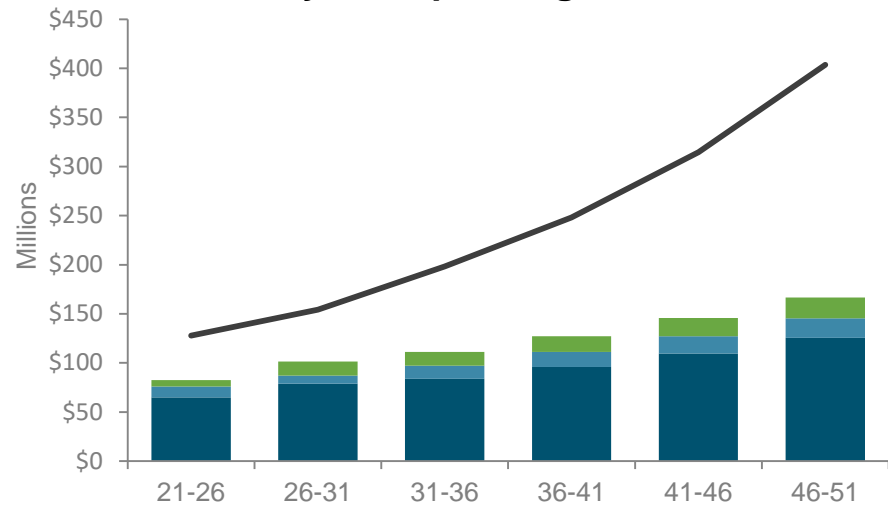
**next ten years spending inflated**



**next 30 years spending not inflated**

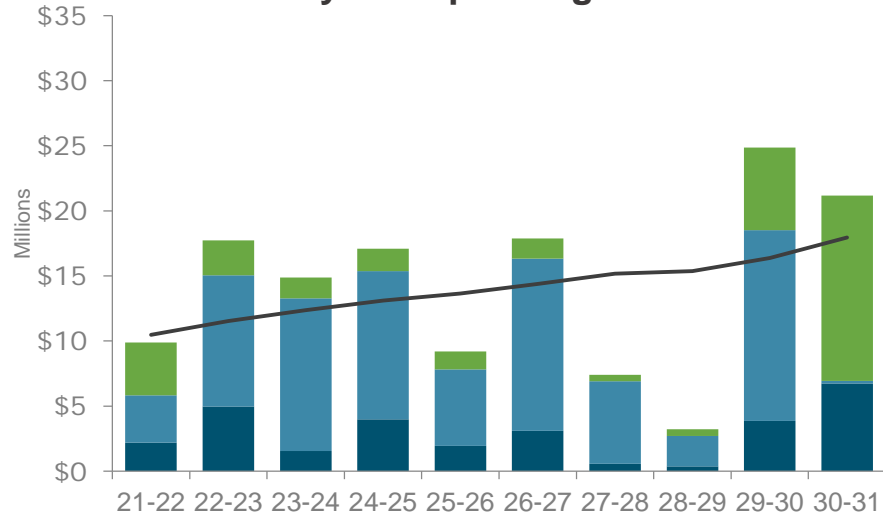


**next 30 years spending inflated**

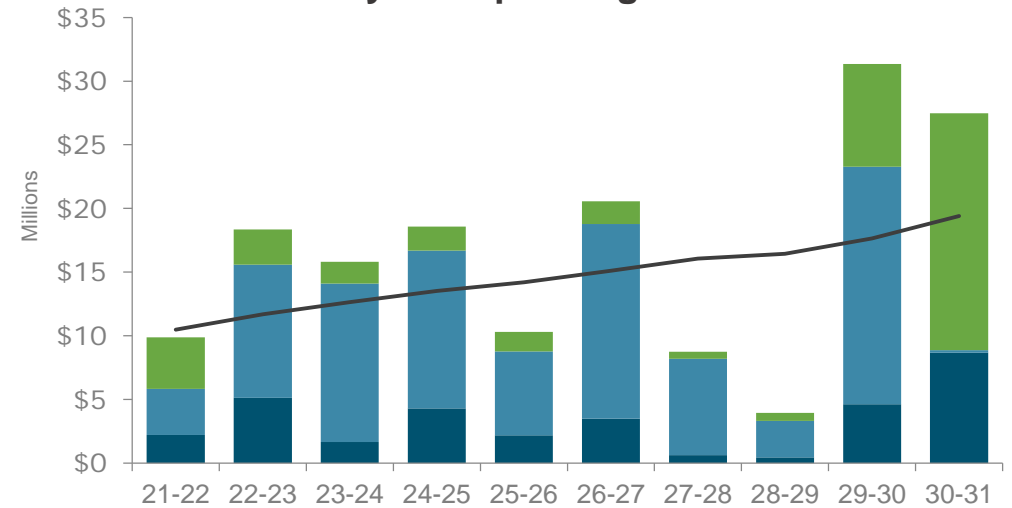


## Water Supply

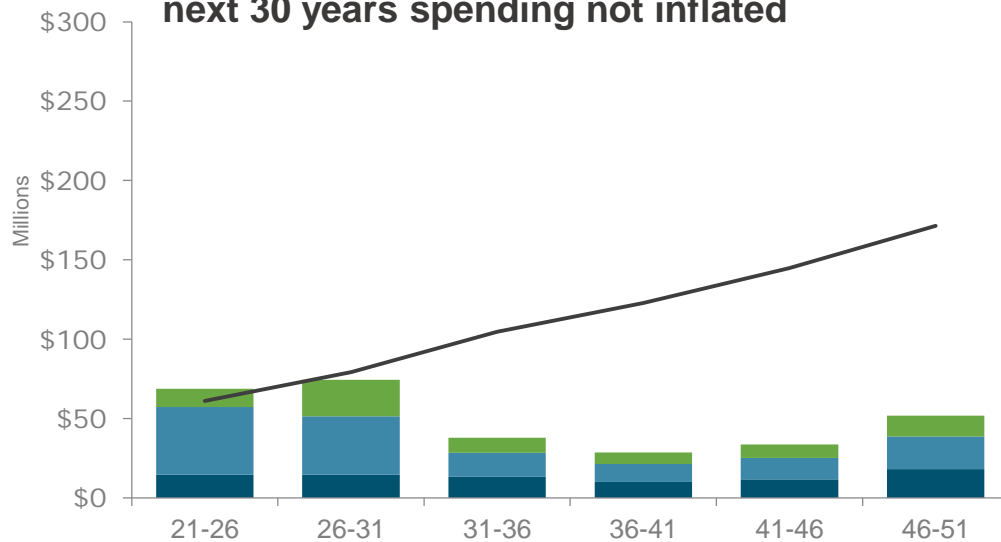
### next ten years spending not inflated



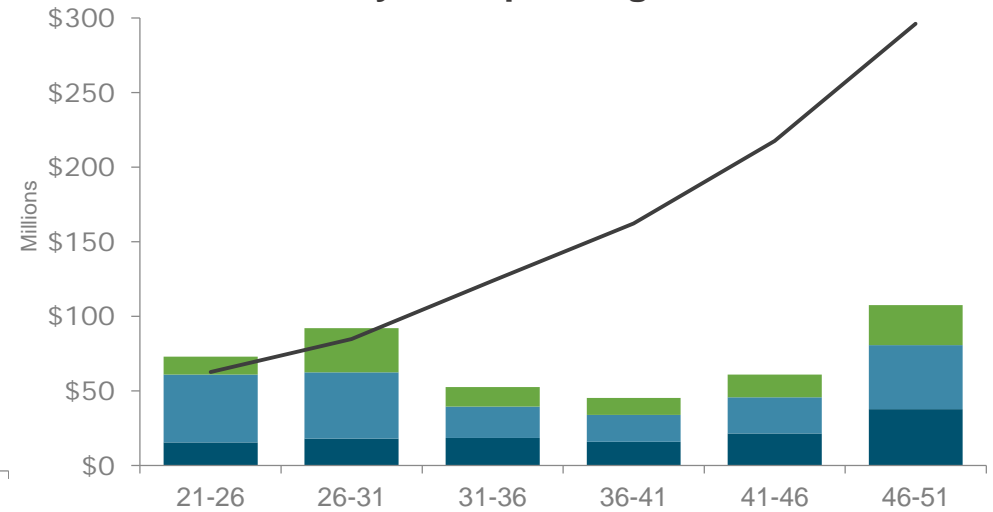
### next ten years spending inflated



### next 30 years spending not inflated

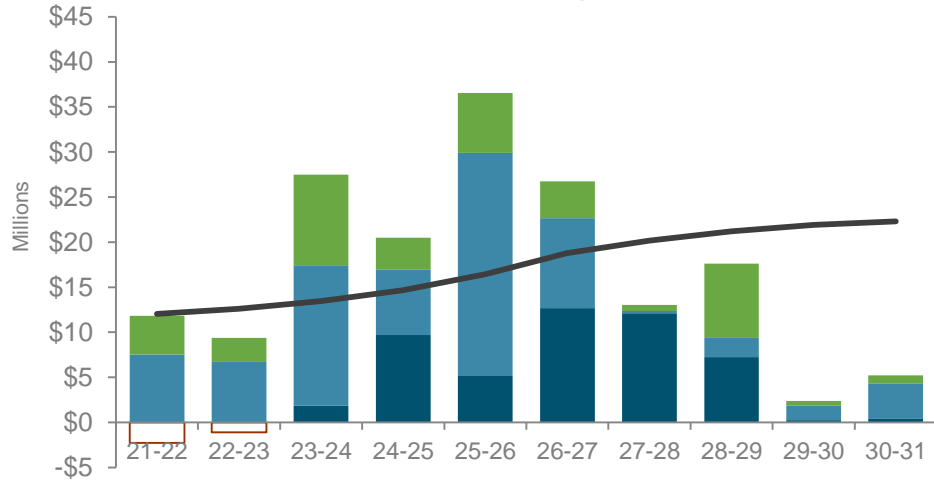


### next 30 years spending inflated

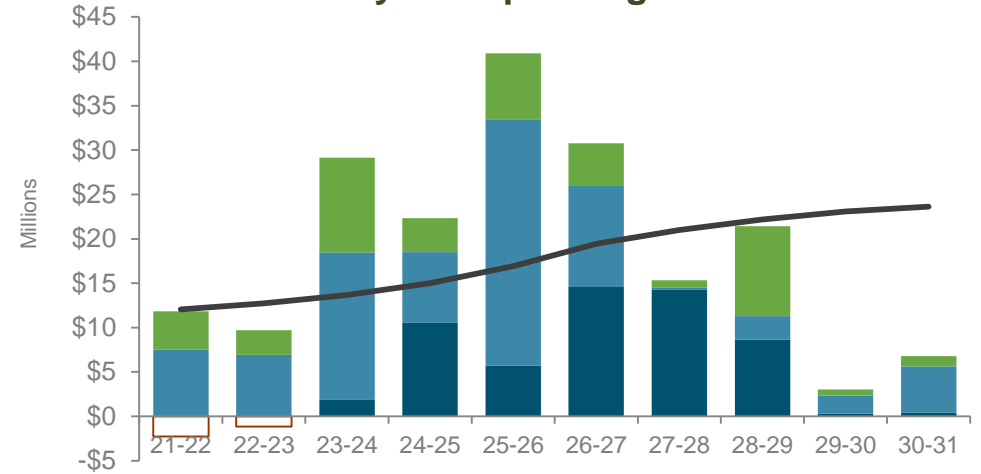


## Wastewater

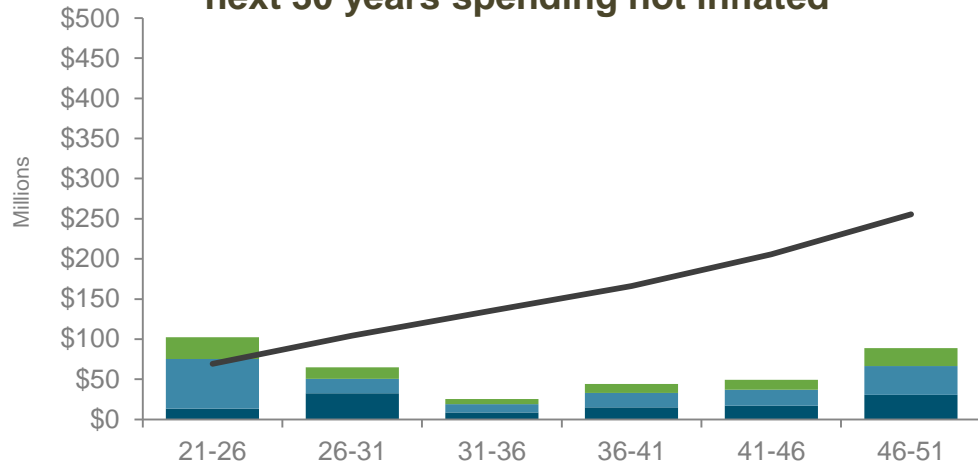
### next ten years spending not inflated



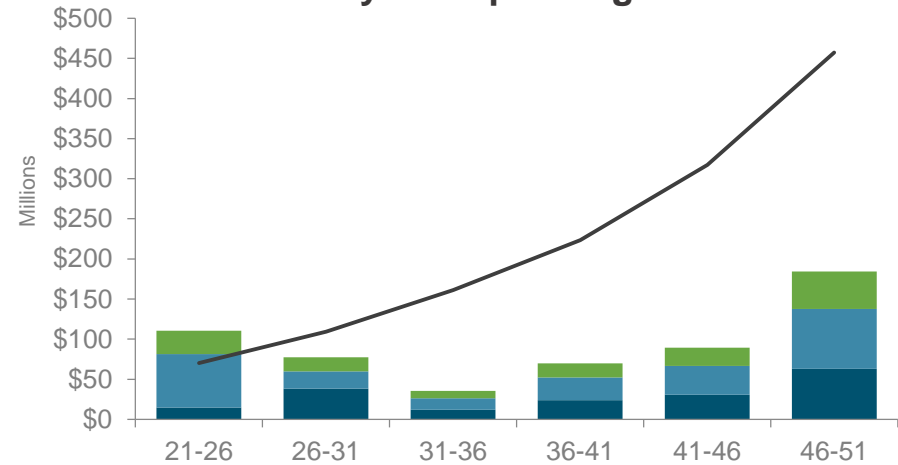
### next ten years spending inflated



### next 30 years spending not inflated

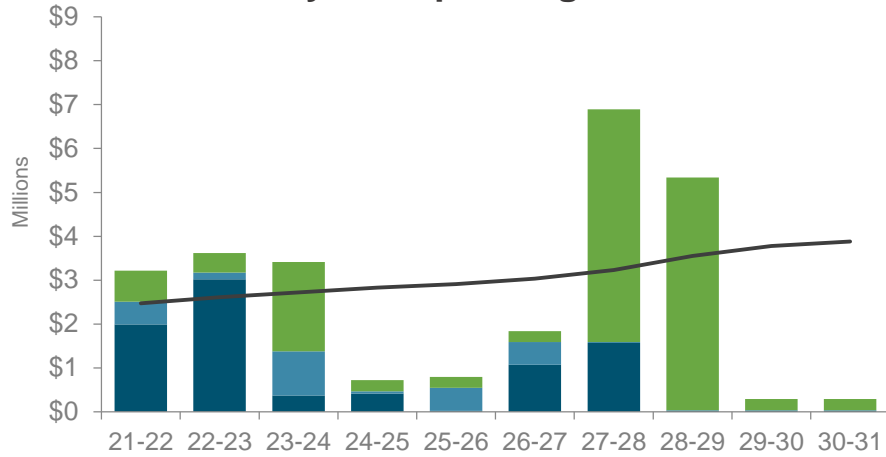


### next 30 years spending inflated

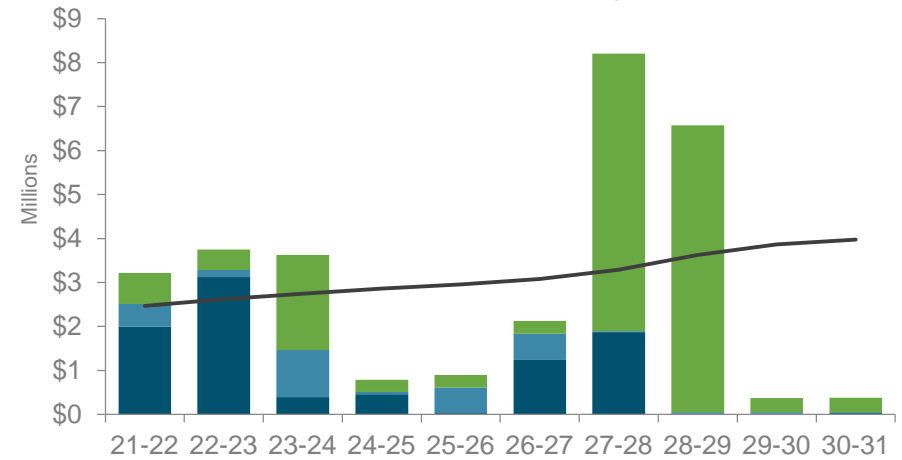


## Stormwater

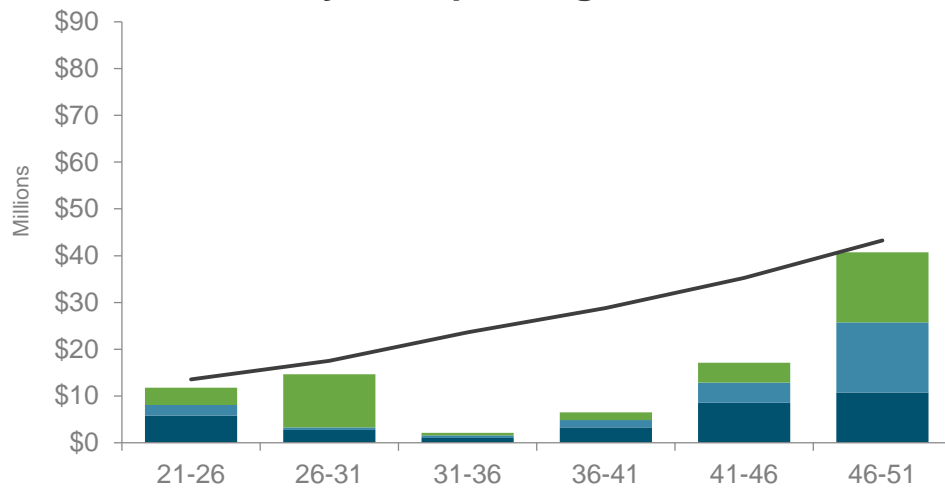
### next ten years spending not inflated



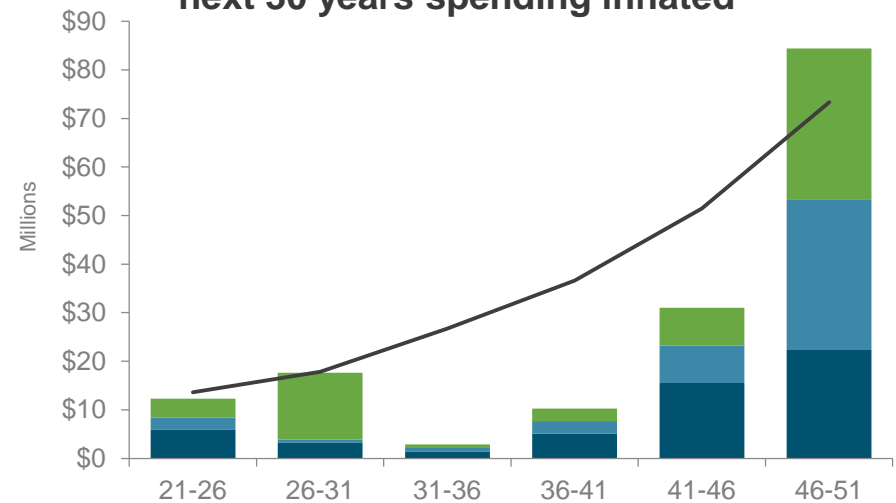
### next ten years spending inflated



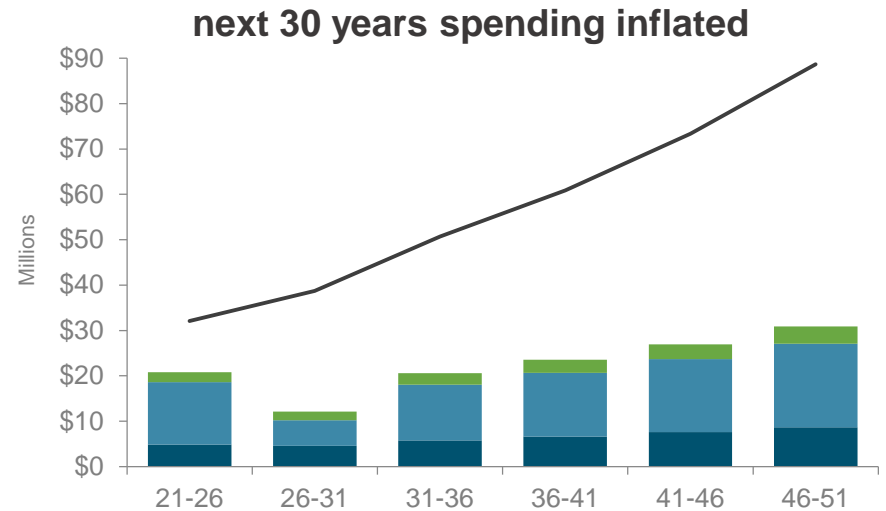
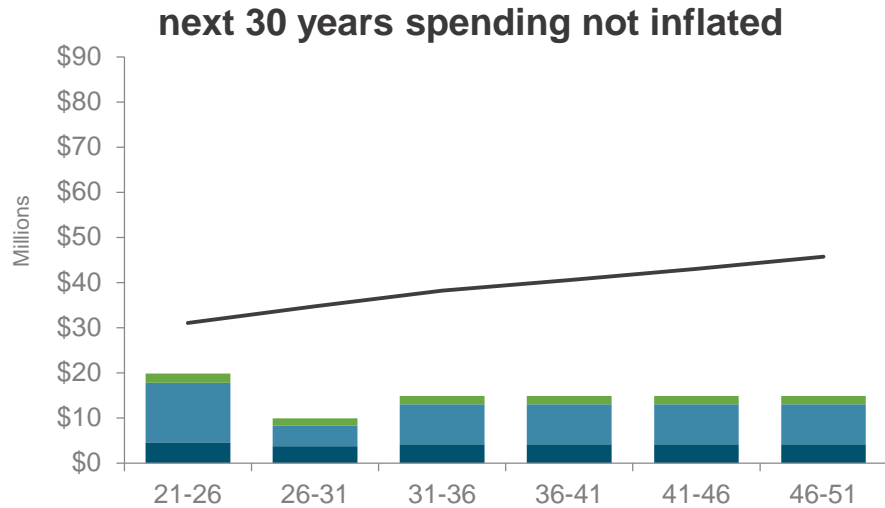
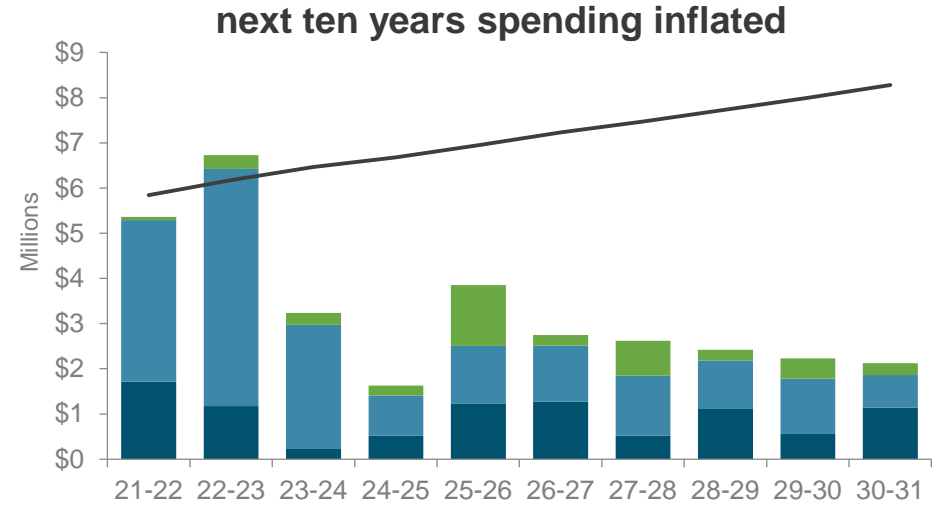
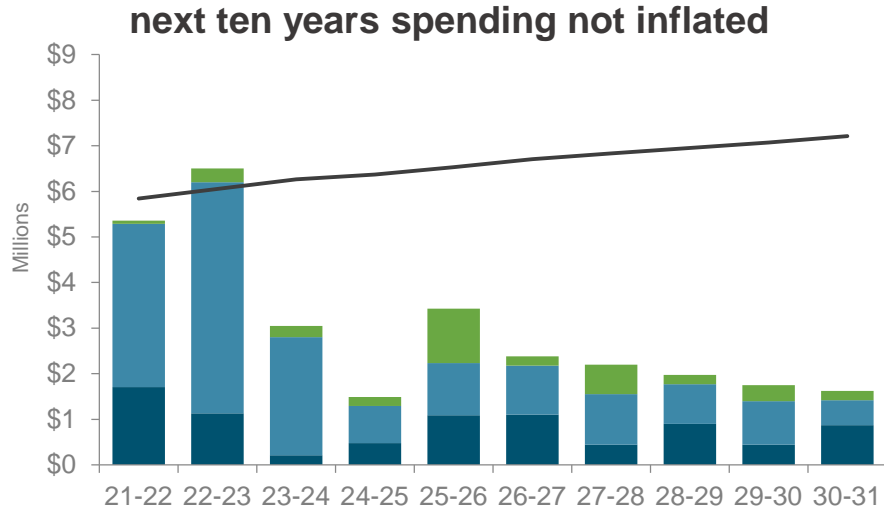
### next 30 years spending not inflated



### next 30 years spending inflated

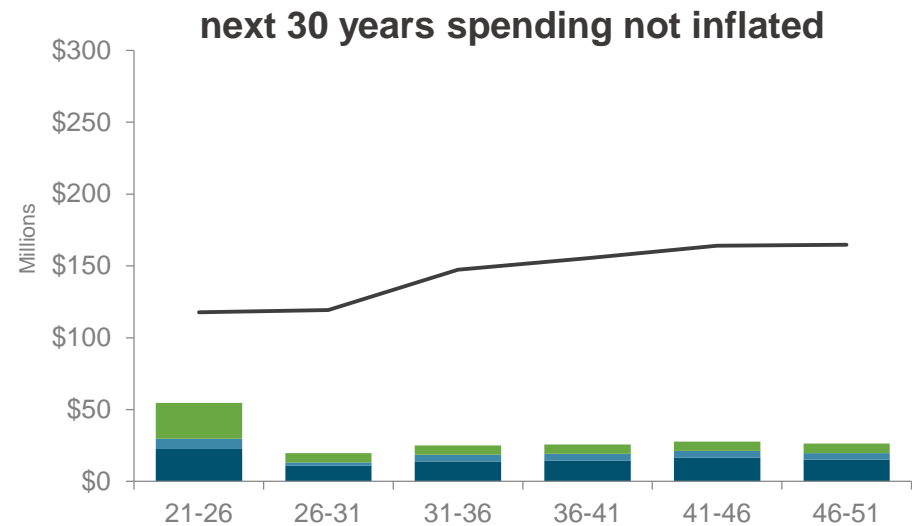
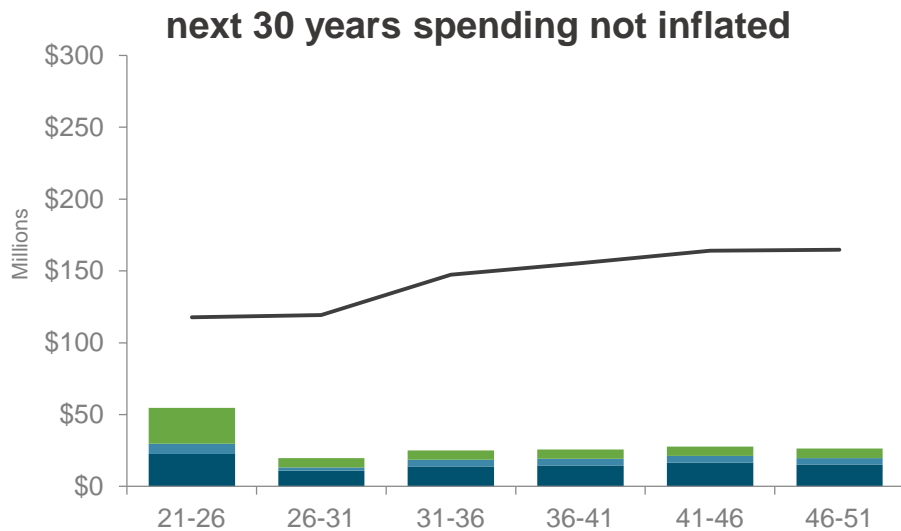
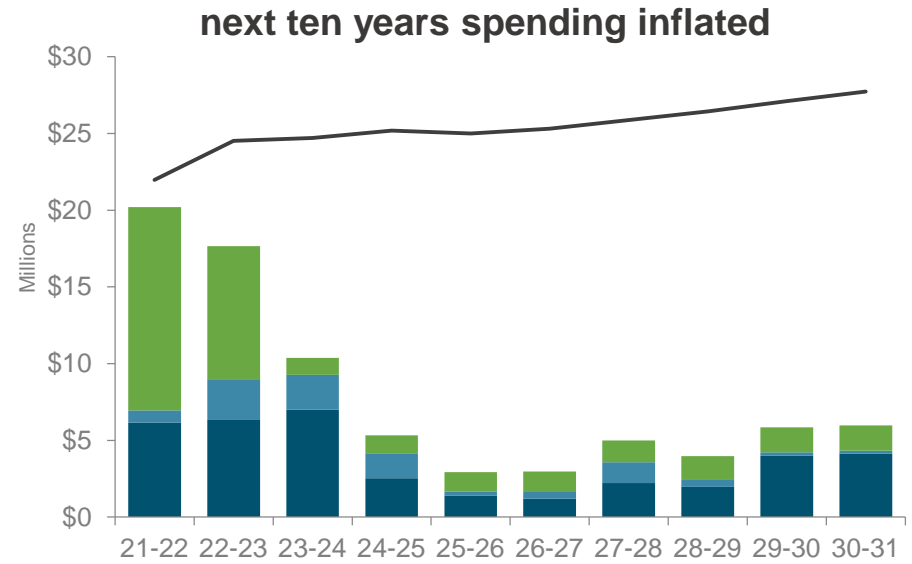
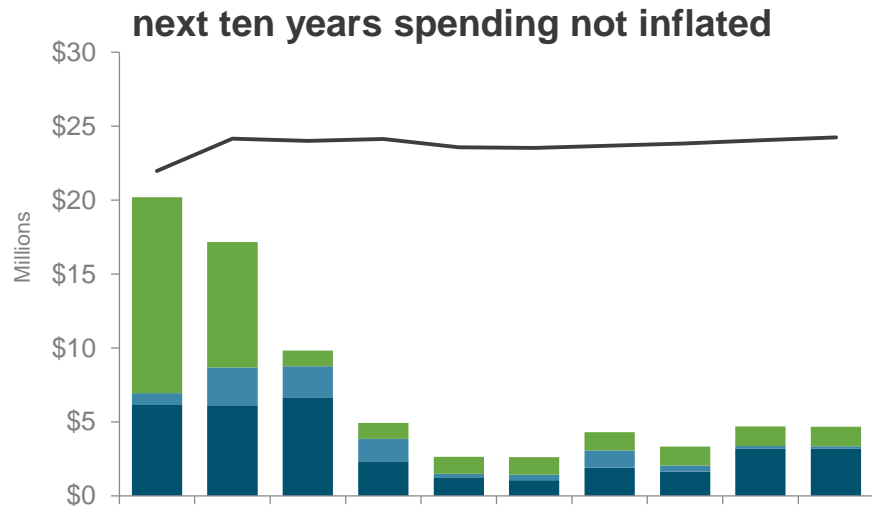


Flood Protection





## Community Facilities





## Assumptions, Disclosure and Compliance

### Assumptions

With any financial forecasting, a number of assumptions must be made. The following assumptions have been made in the preparation of this document. Also presented for each assumption is the “Level of uncertainty”, “Risk” and “Financial impact” for each.

### Legislative

#### *Assumption*

Local Government may be significantly affected by changes in legislation as a result of the Government being re-elected in October 2020. As a result, it is likely that government will continue its reform programme, especially in the areas of, COVID-19 recovery, Community Housing, Environment and the delivery of the Three Waters. However, there are high levels of uncertainty on the exact path government will take and the implementation requirements and impacts on Council. As a result of this uncertainty, the consequential Financial impacts on Council can't be quantified with certainty yet. Therefore it is assumed that legislative and Government Policy changes will not significantly impact upon Council's current responsibilities and activities for the purposes of this LTP as suggested in guidance from Government and the Society of Local Government Managers (SOLGM), especially in regard to the Three Waters.

#### *Level of uncertainty*

High.

#### *Risk*

It is highly likely that the new Government will want to advance its agenda. As a result of local government having a very broad range of activities it is also very probable the cumulative effect on Council will be significant.

### *Financial impact*

To date Government's reforms have not reduced legislative obligations, costs or the impact on the ratepayer. It is too early to assess the Financial impact of the Government's signalled policy announcements. However, it is expected that there will be specific requirements resulting from National Policy Statements and legislative change, to establish a possible new means of delivering the "three waters" in response to the Havelock North Water Quality Inquiry. However, it should be noted that Council has already moved to address many of the recommendations of the Havelock North Inquiry in its infrastructure planning.

### *Infrastructure impact*

Upon recommendation from Central Government, whilst changes will occur with the impending Three Waters Reform, we are continuing to do all Long Term Planning as per the status quo.

Civil engineering labour, plant and materials have already been in high demand in New Zealand. Current procurement costs are already high and timing on projects is somewhat dictated by the availability of contractors.

Significant changes in national standards or deadlines for compliance with statutory requirements may accelerate the delivery of specific capital projects accordingly.

## **COVID-19**

### *Assumption*

That the continuing impacts of COVID-19 on Marlborough will be no worse than currently forecast by the economic commentators. Associated with this is that New Zealand will not return to either Lockdown Levels 3 or 4 and that the effects of COVID-19 internationally do not require Council to:

5. make significant reductions to its planned levels of service in response to the effects on the local economy; and
6. increase its community support.

### *Level of uncertainty*

High.

### *Risk*

The significant risks are threefold:

1. The Government's border control measures and vaccines prove ineffective and COVID-19 enters the community, resulting in the reinstatement of either Level 3 or 4. Reinstatement of level 3 or 4 could have significant impact on Marlborough's retail, tourism and hospitality sectors. Also it could delay the completion of Capital Projects and Council's ability to deliver services.
2. Government closes the borders with the result that Marlborough's industries are unable to recruit the labour they need at critical times during the year. The consequence is that these industries are unable to produce their normal quantities of product.
3. The economies of Marlborough's trading partners suffer a significant down turn, resulting in a diminished market for Marlborough's product. However, as Vaccine programmes are progressively implemented, this risk should reduce.

### *Financial impact*

Should the above risks manifest, this will have a significant impact on Marlborough's economy, resulting in reduced revenue to Council and the probability that Council will be called upon to provide support to the Community. The likelihood is that this will result in increased Council debt.

### *Infrastructure impact*

Delays in capital works projects due to future lockdowns are unknown but provided they are short in duration, cause little upset to the final delivery schedule. The delays in receiving parts and equipment from overseas however does have a significant impact on delivery. Large lead times on specific infrastructure can be overcome with suitable planning, however this also changes the procurement process on

specific projects therefore reducing opportunities for innovation and removing a degree of competition in the tendering the process.

Aside from these delays affecting the capital programme, should unforeseen asset failure occur prior to the planning for replacement, there is also the risk of reduction to the level of service should asset failure occur before parts and equipment can be received.

### *Inflation*

#### *Assumption*

The costs, revenues and asset values reflected in this plan reflect the following “Forecasts of Price Level Change Adjustors to 2031” produced by Business Economic Research Limited (BERL) in September 2020 for the Society of Local Government Managers. BERL provided three scenarios for their forecast, Council has adopted the middle scenario.

Label Year Ending	Planning and Regulation	Roading	Transport	Community Activities	Water and Environmental
% change on year earlier					
June 2020	1.7	1.9	1.8	1.7	2.5
June 2021	0.5	0.8	0.7	-0.2	-3.8
June 2022	2.7	3.3	2.9	3.2	6.0
June 2023	2.5	3.1	2.6	2.7	3.5
June 2024	2.3	3.0	2.4	2.5	2.6
June 2025	2.2	2.9	2.4	2.4	2.7
June 2026	2.2	2.9	2.4	2.5	2.9
June 2027	2.2	2.9	2.4	2.4	2.8

Label Year Ending	Planning and Regulation	Roading	Transport	Community Activities	Water and Environmental
% change on year earlier					
June 2028	2.2	2.9	2.4	2.5	3.2
June 2029	2.2	2.9	2.4	2.6	3.3
June 2030	2.2	2.9	2.4	2.6	3.4
June 2031	2.2	2.9	2.4	2.4	3.1
20 year average % pa	2.0	2.5	2.2	2.1	2.5

BERL also consolidates the above adjustors into a consolidated Local Government Cost Index (LGCI) which is further split between operating and capital expenditure.

Year ending	OPEX	CAPEX	TOTAL
annual average % change			
June 2020	1.9	2.0	2.0
June 2021	-0.6	-0.9	-0.7
June 2022	3.6	4.0	3.7
June 2023	2.9	3.0	2.9
June 2024	2.5	2.6	2.5
June 2025	2.5	2.6	2.5

Year ending	OPEX	CAPEX	TOTAL
	annual average % change		
June 2026	2.5	2.7	2.6
June 2027	2.5	2.6	2.5
June 2028	2.6	2.8	2.6
June 2029	2.7	2.8	2.7
June 2030	2.7	2.9	2.7
June 2031	2.6	2.7	2.6
20 year average %pa	2.2	2.3	2.2

#### *Level of uncertainty*

Medium to high.

NB: The forecast increases for Capital Expenditure are generally higher than operating cost increases and it is the Capital Expenditure that has historically driven rates increases.

#### *Risk*

There is a risk that the local inflation rates may be higher or lower than the national averages forecast by BERL.

#### *Financial impact*

Council has assumed a long term interest rate on internal loans of 4.0% for the entire 10 years covered by the Long Term Plan. External interest rates may vary depending on the term of the debt and prevailing market conditions.

#### *Infrastructure impact*

Deferral of capital projects which may impact upon the level of service that can be provided.

## Interest rate on Council borrowings

#### *Assumption*

Council has assumed a long term interest rate on internal loans of 4.0% for the entire 10 years covered by the Long Term Plan. External interest rates may vary depending on the term of the debt and prevailing market conditions.

#### *Level of uncertainty*

Medium.

#### *Risk*

As a result of the continuing impact of the Global Financial Crisis, COVID-19 and the expectation of increased interest rates in the future, Council has adopted a conservative position compared to current market rates to mitigate the risk associated with interest rate movements. Council has adopted this approach as interest rates can increase significantly within short timeframes, as has happened in the past. Council will attempt to mitigate the impact of interest rate rises with a prudent hedging programme that operates in accordance with its Treasury Policy. However, because of Council's current low debt level, its ability to hedge significant amounts of its forecast debt is limited.

#### *Financial impact*

Increases in interest rates above 4.0% will result in higher debt servicing costs and rates funding requirements. Council only debt (internal and external) is currently forecast to peak at approximately \$246 million. As a result a 1% increase in interest rates above the 4.0% forecast would result in increased interest costs of \$2.5 million.

#### *Infrastructure impact*

Deferral of capital projects which may impact upon the level of service that can be provided.

## Population growth

### *Assumption*

In preparing the Long Term Plan Council has assumed based on actual results that population growth will occur above the 31 March 2021 Statistics New Zealand medium population growth projections. Population growth is further discussed in the Key Issues and Infrastructure Strategy sections of the Long Term Plan.

### *Level of uncertainty*

Low.

### *Risks*

If population growth occurs at a slower rate than forecast, then the level of development contributions received will be lower than expected. However, there is the opportunity to mitigate the Financial impact by slowing the Capital Expenditure programme. It is not expected that levels of service will be impacted upon significantly.

### *Financial impact*

If population growth occurs at a slower rate than forecast, then the level of development contributions received will be lower than expected. However, there is the opportunity to mitigate the Financial impact by slowing the Capital Expenditure programme. It is not expected that levels of service will be impacted upon significantly.

### *Infrastructure impact*

If the population declines, meeting the fixed costs (including operation and maintenance, depreciation, financing and insurance) of the infrastructure could place a significant burden on the remaining residents and businesses.

## Economic life

### *Assumption*

Council has made a number of assumptions about the useful lives of its assets. The detail for each asset category is shown in the Statement of

Accounting Policies. The useful lives are consistent with Council's experience with respect to its ongoing replacement programme.

### *Level of uncertainty*

Low - above ground.

Medium – below ground.

### *Risk*

Assets either wear out or become technically obsolescent and need to be replaced earlier than anticipated.

### *Financial impact*

Depreciation and borrowing costs would increase if replacement Capital Expenditure was required earlier than anticipated. However, these impacts could be mitigated in part by reprioritising the Capital Expenditure programme. There may also be an increase in maintenance costs to keep the asset operational until it is decided to proceed with replacement.

### *Infrastructure impact*

If useful lives of assets are shorter than what is assumed, forward works programmes need to be reprioritised and non-critical assets will be 'sweat' for a longer period to allow for the required change in programme. Should useful lives of assets be found to be longer than assumed, forward works programmes can be adjusted and renewal programmes can be deferred as appropriate.

## Subsidy rates

### *Assumption*

The New Zealand Transport Agency (NZTA) has recently reviewed its financial assistance policy and it is assumed that Council will retain, for the period of the Plan, its current subsidy rate of 51% for road maintenance and construction works.

### *Level of uncertainty*

Low.

### *Risk*

NZTA will either reduce the subsidy rate and/or toughen the criteria for the inclusion of works in the qualifying programme.

### *Financial impact*

If the subsidy rate is reduced, either a reduction in the level of service or an increase in rates would be required. Council is already receiving very good pricing for road maintenance compared to other Local Authorities, through its collaboration with NZTA in the form of Marlborough Roads.

### *Infrastructure impact*

If the subsidy rate is reduced, either a reduction in the level of service or an increase in rates would be required. Council is already receiving very good pricing for road maintenance compared to other Local Authorities, through its collaboration with NZTA in the form of Marlborough Roads.

## Natural disasters

### *Assumption*

Should a major natural disaster occur the District could be faced with significant repair and reconstruction costs. In 2017 Council estimated the maximum probable loss (MPL) cost as a result of a major earthquake, flood or tsunami at approximately \$485 million, following a joint Treasury supported exercise with AON and Tonkin and Taylor. Inflation adjusted this figure would now be approximately \$520M. It is assumed that this forecast is accurate. It is also assumed that:

- The forecast contributions from the Local Authority Protection Programme (LAPP), insurance, Government and the NZTA will be received.
- Through a combination of Council's reserves, investment realisation, credit facilities and rescheduling capital and other works, Council can

meet the remaining costs associated with a major disaster over a seven year period.

- As a result of a second earthquake occurring in Christchurch, Council has also modelled the Financial impact of second significant event. Through the use of the same mechanisms identified in the two bullet points above, Council could meet the remaining costs associated with a second major disaster over a seven year period post the second event.

The LAPP fund is a mutual pool set up to assist Councils cover their share of damage to "below ground" and river protection assets resulting from a significant natural event. At the time the fund was formed commercial insurance alternatives for these assets was not available. There was also a clear requirement from Central Government, and still is, that any assistance given to rebuild infrastructure following a disaster will only be made available if Council has made adequate financial provisions to cover its own repair obligations.

Above ground assets are insured through commercial insurance. These costs are in addition to LAPP contributions. Insurance costs have increased over recent years as a direct result of national and international disasters. Council has mitigated the effect by joining with Nelson City and Tasman District Councils.

### *Level of uncertainty*

Low.

### *Risks*

The actual costs of recovery from a major natural disaster are higher than the forecast Maximum Probable Loss (MPL) of approximately \$520 million.

### *Financial impact*

Should Council's current estimate of MPL and existing arrangements prove inadequate, either an increase in debt and corresponding increase in rates or a slowing in the rebuild would need to occur.

### *Infrastructure impact*

Significant disruption of service immediately and reduction in the level of service able to be provided for a reasonable length of time following an event dependant on the damage and extent of the event. High costs of emergency response, combined with the lead times and costs for parts and equipment from overseas during COVID-19.

## Taxation framework

### *Assumption*

Council has assumed that the existing taxation framework for the Marlborough District Council group will continue for the period of the Long Term Plan.

### *Level of uncertainty*

Low.

### *Risks*

That the Inland Revenue Department takes the view that Council has used an incorrect tax treatment for any of its activities. Council while being generally exempt from Income Tax, is taxable on income received from subsidiaries. Council also has to account for GST, FBT, Withholding Tax and PAYE.

To mitigate this risk, Council seeks advice from PriceWaterhouseCoopers (PWC) and obtains legal opinions and IRD Binding Rulings where appropriate. Every three years Council also requests PWC to undertake a review of its taxation activities. The last review was in 2020 with the resulting recommendations implemented.

### *Financial impact*

The likely Financial impact is low, because of the steps Council takes to mitigate its risks.

## Asset ownership and valuation

In the preparation of the Long Term Plan it has been assumed that Council will retain:

- Ownership of MDC Holdings Limited and its subsidiaries:
- Its ownership share (88.5%) in Marlborough Regional Forestry, with Kaikoura District Council owning the remaining 11.5%.
- Ownership of all substantial assets currently owned.

It has also been assumed that Council will revalue its major assets annually.

### *Level of uncertainty*

Low.

### *Risk*

The asset values shown in the Long Term Plan have been adjusted based on the BERL indices. The risk is that the results of actual revaluations may be higher or lower than those disclosed in the Long Term Plan.

### *Financial impact*

If asset revaluations are higher than forecast, this will increase the resulting depreciation cost and rates as Council moves to provide for asset replacement.

### *Infrastructure impact*

Upon recommendation from Central Government, whilst changes will occur with the impending Three Waters Reform, we are continuing to do all Long Term Planning as per the status quo. With this in mind, should the valuation increase occur due to higher than anticipated replacement rates, the increased cost in delivery of the capital budget may require projects to be deferred and non-critical assets to be 'sweat' from longer than intended.

## Sources of funds for capital expenditure

Page 213 of the Financial Strategy identifies the expected sources of funds for Council's Capital Expenditure programme. It has been



assumed that the funds identified for each of these sources will be received.

#### *Level of uncertainty*

Low.

#### *Risk*

That the forecast funding will not be received as forecast.

#### *Financial impact*

As it is proposed to fund Capital Expenditure from a range of sources it should be possible to compensate a funding shortfall from one source with funding from another i.e. borrowing. If it is decided to increase borrowing a debt servicing cost and a corresponding increase in rates will arise. The alternative is to slow Capital Expenditure especially if the project is growth related and the funding shortfall relates to Development Contributions.

#### *Infrastructure impact*

With a reduced level of funding, the capital projects may be required to be deferred and non-critical assets would be made to 'sweat' for longer than intended.

#### **Climate change**

Council has assumed that the climate changes in relation to rainfall, temperature and sea level will occur as predicted. It has been further assumed that climate change will have minimal impact over the period of the 2021-2031 Long Term Plan. This topic is considered in greater depth in Council's Infrastructure Strategy. This is appropriate given this Strategy covers a longer 30 year period.

#### *Level of uncertainty*

Low.

#### *Risk*

That asset and hazard planning has not adequately assessed climate change.

#### *Financial impact*

For the period of the Long Term Plan, the Financial impact is assessed as low as climate change on the whole is occurring very slowly, providing extended lead times for mitigation measures if required.

#### *Infrastructure impact*

Remedial programmes may need to be accelerated and lower levels of service tolerated until works can be completed.

As understanding of the effects of climate change on infrastructure in Marlborough improves, all capital projects will give consideration of the effects of climate change in their regards to their priority and their design. The effects of climate change on demand, sustainability, future level of service and resiliency of infrastructure assets will be considered in operational and capital planning and expenditure.

High impact on flood risk if the rate of change is much faster than what is currently predicted, 0.3m by 2050 and a 1% AEP flood will increase in size by 10-15%.

#### **Emissions Trading Scheme (ETS)**

Any direct impacts of the ETS through potential price increases are assumed to be covered by Council's inflation assumptions and thus factored into the forecasts.

Specific ETS costs relating to waste and landfill have been incorporated into those estimates, together with the increased revenue that will be received.

Pre 1990 forestry has been registered. Any costs associated with ETS will be minimal given Council's rotation and replanting policy.

### *Level of uncertainty*

Low.

### *Risk*

The impact and scope of the ETS may be more than assumed.

### *Financial impact*

The Council will face increased compliance and operating costs, which if significant enough, may require higher fees and charges or increased rating requirements to fund them. However, Council had already taken steps to reduce the landfill liability and fix the price of the Emission Trading Units that will be required to be surrendered during the Scheme's operation.

### *Infrastructure impact*

Consideration is given to sustainability and emissions in the planning of maintaining, replacing, upgrading and extending all infrastructure. A cost benefit analysis will be applied where proven products, practices and principles exist.

### *Resource consents*

Council has assumed that it will continue to hold and comply with appropriate resource consents to enable it to continue its activities, especially in relation to water, sewerage and stormwater.

### *Level of uncertainty*

Low.

### *Risk*

Appropriate consents are either not renewed or require improvements in level of service before being granted. The trends in Resource Consent requirements are covered more fully in the Infrastructure Strategy.

### *Financial impact*

The main Financial impact could occur if levels of service require improvement before a resource consent renewal is granted. The resulting increase in costs will likely require an increase in borrowing which in turn will impact on rates.

### *Infrastructure impact*

Delays in approval of future resource consents due to factors beyond our reasonable control e.g. time extension for consultation, puts us at risk of not meeting our legislative requirements and incurring unnecessary costs and damage to our reputation. Any failure to meet the requirements of existing resource consents is also potentially damaging to the environment and our reputation. Working with the Regulatory Department to ensure compliance is met and improving the software in which we record and report on compliance will minimize the risk of failures.

# Financial Statements

## Forecast statement of comprehensive revenue and expense

for the year ending 30 June:	Notes	2021 (AP) \$000s	2022 \$000s	2023 \$000s	2024 \$000s	2025 \$000s	2026 \$000s	2027 \$000s	2028 \$000s	2029 \$000s	2030 \$000s	2031 \$000s
<b>Revenue:</b>												
Rates, excluding targeted water rates	2	69,492	72,783	77,042	81,071	89,110	94,110	98,140	102,079	106,120	110,557	114,147
Targeted rates for metered water supply	2	2,522	3,110	3,730	4,311	4,558	4,944	5,160	5,077	5,199	5,349	5,498
Subsidies and grants	4	10,349	23,968	12,331	10,197	12,275	14,564	14,998	17,247	13,661	14,080	14,479
Interest revenue	3	1,720	2,467	4,122	5,725	6,547	6,451	6,348	6,215	6,095	5,968	5,680
Development and financial contributions	4	3,572	7,176	7,326	7,478	7,634	7,792	7,955	8,120	8,289	8,462	8,620
Other revenue	4	33,575	39,279	41,967	38,411	38,962	40,937	43,081	46,524	50,008	51,713	52,830
Gains	4	4,884	1,263	1,693	1,434	1,501	1,591	1,692	1,059	486	423	314
<b>Total revenue</b>	<b>1</b>	<b>126,114</b>	<b>150,046</b>	<b>148,211</b>	<b>148,627</b>	<b>160,587</b>	<b>170,389</b>	<b>177,374</b>	<b>186,321</b>	<b>189,858</b>	<b>196,552</b>	<b>201,568</b>
<b>Expenditure by function:</b>												
<b>People</b>												
Democratic Process		3,438	3,503	3,809	3,866	3,822	4,072	4,108	4,080	4,364	4,423	4,395
Culture and Heritage		1,248	1,362	1,352	1,414	1,417	1,563	1,423	1,427	1,432	1,436	1,439
Housing for Seniors		1,560	1,606	1,639	1,675	1,686	1,697	1,851	1,821	1,841	1,896	1,922
Community Support		3,194	3,104	3,123	2,949	2,986	3,000	3,040	3,106	3,127	3,173	3,242
Library Services		2,748	3,004	3,147	3,521	3,534	3,648	3,714	3,758	3,843	3,974	4,068
Emergency Management		654	732	753	772	792	805	826	846	869	893	915
<b>Community Facilities</b>		<b>13,899</b>	<b>14,294</b>	<b>14,341</b>	<b>14,447</b>	<b>14,755</b>	<b>15,197</b>	<b>15,342</b>	<b>15,723</b>	<b>16,065</b>	<b>16,449</b>	<b>16,835</b>
<b>Roads and Footpaths</b>		<b>22,128</b>	<b>23,370</b>	<b>24,599</b>	<b>25,630</b>	<b>26,665</b>	<b>27,634</b>	<b>28,742</b>	<b>29,742</b>	<b>30,818</b>	<b>31,899</b>	<b>32,941</b>
<b>Flood Protection and Control Works</b>		<b>5,652</b>	<b>5,844</b>	<b>6,173</b>	<b>6,470</b>	<b>6,680</b>	<b>6,939</b>	<b>7,214</b>	<b>7,461</b>	<b>7,723</b>	<b>7,991</b>	<b>8,281</b>
<b>Sewerage</b>		<b>11,491</b>	<b>12,033</b>	<b>12,731</b>	<b>13,665</b>	<b>14,996</b>	<b>16,924</b>	<b>19,452</b>	<b>21,003</b>	<b>22,175</b>	<b>23,090</b>	<b>23,642</b>
<b>Stormwater Drainage</b>		<b>1,871</b>	<b>2,469</b>	<b>2,623</b>	<b>2,742</b>	<b>2,859</b>	<b>2,952</b>	<b>3,079</b>	<b>3,293</b>	<b>3,623</b>	<b>3,862</b>	<b>3,974</b>
<b>Water Supply</b>		<b>9,181</b>	<b>10,483</b>	<b>11,698</b>	<b>12,649</b>	<b>13,530</b>	<b>14,198</b>	<b>15,096</b>	<b>16,050</b>	<b>16,439</b>	<b>17,635</b>	<b>19,385</b>
<b>Solid Waste Management</b>		<b>11,163</b>	<b>10,852</b>	<b>12,809</b>	<b>12,921</b>	<b>13,261</b>	<b>12,661</b>	<b>12,935</b>	<b>13,252</b>	<b>13,590</b>	<b>13,930</b>	<b>14,230</b>
<b>Environmental Management</b>												
Environmental Policy		1,270	1,900	1,869	1,907	1,959	2,012	2,068	2,126	2,190	2,255	2,320
Environmental Science and Monitoring		4,708	6,175	6,646	6,481	6,573	6,628	6,813	7,005	7,030	7,224	7,167
Resource Consents		2,613	2,993	3,092	3,179	3,253	3,326	3,445	3,531	3,548	3,636	3,669
Environmental Protection		1,663	1,807	1,948	2,007	2,059	2,109	2,167	2,225	2,289	2,353	2,418
<b>Regulatory</b>												
Biosecurity		1,842	6,499	7,737	2,675	2,026	2,082	2,136	2,100	2,162	2,228	2,288
Building Control		3,974	4,377	4,506	4,671	4,761	4,886	4,982	5,149	5,263	5,410	5,556
Environmental Health		486	697	722	745	764	784	804	826	849	873	896
Animal Control		803	828	851	872	891	911	932	953	975	995	1,018
Harbours		1,713	1,888	1,934	1,995	2,032	2,006	2,040	2,115	2,193	2,252	2,295
<b>Regional Development</b>		<b>6,929</b>	<b>6,311</b>	<b>6,557</b>	<b>6,837</b>	<b>6,829</b>	<b>7,018</b>	<b>7,425</b>	<b>7,350</b>	<b>7,501</b>	<b>7,631</b>	<b>7,748</b>
<b>Total expenditure by function</b>		<b>114,228</b>	<b>126,131</b>	<b>134,659</b>	<b>134,090</b>	<b>138,130</b>	<b>143,052</b>	<b>149,634</b>	<b>154,942</b>	<b>159,909</b>	<b>165,508</b>	<b>170,644</b>
(less)/plus net external interest		(2,041)	226	2,194	3,641	3,434	2,743	1,668	1,056	531	(276)	(1,358)
<b>Total expenditure by function</b>		<b>112,187</b>	<b>126,357</b>	<b>136,853</b>	<b>137,731</b>	<b>141,564</b>	<b>145,795</b>	<b>151,302</b>	<b>155,998</b>	<b>160,440</b>	<b>165,232</b>	<b>169,286</b>

### Forecast statement of comprehensive revenue and expense (continued)

for the year ending 30 June:	Notes	2021 (AP)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
		\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s
<b>Non-activity expenditure:</b>												
Other expenditure	5	7,006	5,156	5,248	5,636	5,719	5,949	6,077	6,140	6,292	6,351	6,391
Marlborough Regional Forestry	5	1,108	1,009	1,212	1,209	1,209	1,209	1,209	1,209	1,209	1,209	1,209
<b>Total non-activity expenditure</b>		<b>8,114</b>	<b>6,165</b>	<b>6,460</b>	<b>6,845</b>	<b>6,928</b>	<b>7,158</b>	<b>7,286</b>	<b>7,349</b>	<b>7,501</b>	<b>7,560</b>	<b>7,600</b>
<b>Total expenditure</b>	5	<b>120,301</b>	<b>132,522</b>	<b>143,313</b>	<b>144,576</b>	<b>148,492</b>	<b>152,953</b>	<b>158,588</b>	<b>163,347</b>	<b>167,941</b>	<b>172,792</b>	<b>176,886</b>
<b>Surplus</b>		<b>5,813</b>	<b>17,524</b>	<b>4,898</b>	<b>4,051</b>	<b>12,095</b>	<b>17,436</b>	<b>18,786</b>	<b>22,974</b>	<b>21,917</b>	<b>23,760</b>	<b>24,682</b>

### Forecast statement of other comprehensive revenue and expense

for the year ending 30 June:	Note	2021 (AP)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
		\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s
<b>Surplus for the year</b>		<b>5,813</b>	<b>17,524</b>	<b>4,898</b>	<b>4,051</b>	<b>12,095</b>	<b>17,436</b>	<b>18,786</b>	<b>22,974</b>	<b>21,917</b>	<b>23,760</b>	<b>24,682</b>
<b>Other comprehensive revenue:</b>												
Gain on property revaluations	8	32,571	61,551	56,206	54,584	56,753	61,954	64,730	69,770	75,725	79,313	81,970
<b>Total other comprehensive revenue and expense</b>		<b>32,571</b>	<b>61,551</b>	<b>56,206</b>	<b>54,584</b>	<b>56,753</b>	<b>61,954</b>	<b>64,730</b>	<b>69,770</b>	<b>75,725</b>	<b>79,313</b>	<b>81,970</b>
<b>Total comprehensive revenue and expense</b>		<b>38,384</b>	<b>79,075</b>	<b>61,104</b>	<b>58,635</b>	<b>68,848</b>	<b>79,390</b>	<b>83,516</b>	<b>92,744</b>	<b>97,642</b>	<b>103,073</b>	<b>106,652</b>

### Forecast statement of changes in net assets/equity

for the year ending 30 June:	2021 (AP)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s
<b>Balance at 1 July</b>	1,720,456	1,707,700	1,786,775	1,847,879	1,906,514	1,975,362	2,054,752	2,138,268	2,231,012	2,328,654	2,431,727
Total comprehensive revenue and expense for the year	38,384	79,075	61,104	58,635	68,848	79,390	83,516	92,744	97,642	103,073	106,652
<b>Balance at 30 June</b>	<b>1,758,840</b>	<b>1,786,775</b>	<b>1,847,879</b>	<b>1,906,514</b>	<b>1,975,362</b>	<b>2,054,752</b>	<b>2,138,268</b>	<b>2,231,012</b>	<b>2,328,654</b>	<b>2,431,727</b>	<b>2,538,379</b>

## Forecast statement of financial position

as at 30 June:	Notes	2021 (AP) \$000s	2022 \$000s	2023 \$000s	2024 \$000s	2025 \$000s	2026 \$000s	2027 \$000s	2028 \$000s	2029 \$000s	2030 \$000s	2031 \$000s
<b>Assets:</b>												
<b>Non-current assets:</b>												
Property, plant and equipment	8	1,809,037	1,824,360	1,923,619	2,013,583	2,104,705	2,212,435	2,308,178	2,412,640	2,521,475	2,620,008	2,720,125
Intangible assets	8	9,512	10,758	11,371	11,371	11,140	10,967	10,770	10,265	9,990	9,719	9,473
Forestry assets		17,750	23,342	24,678	26,090	27,583	29,161	30,830	31,877	32,348	32,757	33,061
Other financial assets	7											
- Investments in subsidiaries		6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
- Other		76,711	88,050	143,574	193,925	214,773	204,628	194,983	184,653	171,008	160,363	150,098
Investment property	11	10,500	10,750	10,750	10,750	10,750	10,750	10,750	10,750	10,750	10,750	10,750
<b>Total non-current assets</b>		<b>1,929,510</b>	<b>1,963,260</b>	<b>2,119,992</b>	<b>2,261,719</b>	<b>2,374,951</b>	<b>2,473,941</b>	<b>2,561,511</b>	<b>2,656,185</b>	<b>2,751,571</b>	<b>2,839,597</b>	<b>2,929,507</b>
<b>Current assets:</b>												
Cash and cash equivalents		111	140	109	110	114	123	181	187	187	185	154
Debtors and other receivables	6	11,064	12,953	13,330	13,670	14,010	14,375	14,740	15,117	15,532	15,960	16,375
Other financial assets	7	11,263	14,299	14,299	14,299	14,299	14,299	14,299	14,299	14,299	14,299	14,299
Inventory		329	312	321	329	337	346	355	364	374	384	394
<b>Total current assets</b>		<b>22,767</b>	<b>27,704</b>	<b>28,059</b>	<b>28,408</b>	<b>28,760</b>	<b>29,143</b>	<b>29,575</b>	<b>29,967</b>	<b>30,392</b>	<b>30,828</b>	<b>31,222</b>
<b>Total assets</b>		<b>1,952,277</b>	<b>1,990,964</b>	<b>2,148,051</b>	<b>2,290,127</b>	<b>2,403,711</b>	<b>2,503,084</b>	<b>2,591,086</b>	<b>2,686,152</b>	<b>2,781,963</b>	<b>2,870,425</b>	<b>2,960,729</b>
<b>Liabilities:</b>												
<b>Non-current liabilities:</b>												
Borrowings	10	166,864	173,936	269,265	352,120	396,269	415,623	419,479	421,150	418,606	403,262	386,197
Provisions		6,049	9,616	9,670	9,715	9,761	9,809	9,858	9,909	9,961	10,013	10,069
Employee entitlements		282	287	295	303	311	319	327	335	344	353	362
<b>Total non-current liabilities</b>		<b>173,195</b>	<b>183,839</b>	<b>279,230</b>	<b>362,138</b>	<b>406,341</b>	<b>425,751</b>	<b>429,664</b>	<b>431,394</b>	<b>428,911</b>	<b>413,628</b>	<b>396,628</b>
<b>Current liabilities:</b>												
Creditors and other payables	9	17,958	18,239	18,770	19,248	19,726	20,240	20,754	21,285	21,869	22,471	23,055
Employee entitlements		2,284	2,111	2,172	2,227	2,282	2,341	2,400	2,461	2,529	2,599	2,667
<b>Total current liabilities</b>		<b>20,242</b>	<b>20,350</b>	<b>20,942</b>	<b>21,475</b>	<b>22,008</b>	<b>22,581</b>	<b>23,154</b>	<b>23,746</b>	<b>24,398</b>	<b>25,070</b>	<b>25,722</b>
<b>Total liabilities</b>		<b>193,437</b>	<b>204,189</b>	<b>300,172</b>	<b>383,613</b>	<b>428,349</b>	<b>448,332</b>	<b>452,818</b>	<b>455,140</b>	<b>453,309</b>	<b>438,698</b>	<b>422,350</b>
<b>Net assets</b>		<b>1,758,840</b>	<b>1,786,775</b>	<b>1,847,879</b>	<b>1,906,514</b>	<b>1,975,362</b>	<b>2,054,752</b>	<b>2,138,268</b>	<b>2,231,012</b>	<b>2,328,654</b>	<b>2,431,727</b>	<b>2,538,379</b>

## Forecast statement of financial position (continued)

as at 30 June:	Notes	2021 (AP)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
		\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s
<b>Equity</b>												
Accumulated funds		649,743	682,345	701,641	724,189	743,072	749,660	758,365	768,347	768,057	770,536	771,740
Asset revaluation reserves		1,063,148	1,050,461	1,106,667	1,161,251	1,218,004	1,279,958	1,344,688	1,414,458	1,490,183	1,569,496	1,651,466
Other reserves	13	45,949	53,969	39,571	21,074	14,286	25,134	35,215	48,207	70,414	91,695	115,173
<b>Total equity</b>		<b>1,758,840</b>	<b>1,786,775</b>	<b>1,847,879</b>	<b>1,906,514</b>	<b>1,975,362</b>	<b>2,054,752</b>	<b>2,138,268</b>	<b>2,231,012</b>	<b>2,328,654</b>	<b>2,431,727</b>	<b>2,538,379</b>

## Forecast statement of cash flows

as at 30 June:		2021 (AP)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
		\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s
<b>Cash flows from operating activities:</b>												
Receipts from rates revenue		72,014	75,893	80,773	85,381	93,668	99,054	103,300	107,156	111,318	115,906	119,645
Receipts from other revenue		42,707	66,218	57,623	51,750	54,094	57,442	59,074	64,505	63,768	65,492	67,137
Interest received		1,720	2,467	4,122	5,725	6,547	6,451	6,348	6,215	6,095	5,968	5,680
Payments to suppliers and employees		(88,060)	(96,803)	(101,372)	(98,238)	(100,103)	(103,270)	(106,837)	(109,359)	(112,462)	(115,640)	(118,729)
Interest paid		(3,832)	(5,594)	(8,307)	(10,572)	(10,939)	(11,168)	(11,431)	(11,773)	(11,890)	(11,749)	(11,346)
<b>Net cash flow from operating activities</b>		<b>24,549</b>	<b>42,082</b>	<b>32,736</b>	<b>33,939</b>	<b>43,156</b>	<b>48,394</b>	<b>50,335</b>	<b>56,620</b>	<b>56,701</b>	<b>59,844</b>	<b>62,249</b>
<b>Cash flows from investing activities:</b>												
Receipts from sale of property, plant and equipment		6,000	-	3,540	22	718	5	24	32	64	99	16
Movement in investments		(6,667)	(19,920)	(55,523)	(50,352)	(20,847)	10,145	9,643	10,333	13,647	10,645	10,263
Dividends received		2,995	2,599	2,447	2,788	3,194	4,204	5,279	5,655	6,377	6,893	6,893
Purchase of property, plant and equipment		(66,439)	(72,845)	(78,663)	(69,357)	(70,477)	(82,207)	(69,198)	(74,428)	(74,373)	(62,271)	(62,525)
<b>Net cash flow from investing activities</b>		<b>(64,111)</b>	<b>(90,067)</b>	<b>(128,096)</b>	<b>(116,792)</b>	<b>(87,301)</b>	<b>(67,738)</b>	<b>(54,133)</b>	<b>(58,284)</b>	<b>(54,157)</b>	<b>(44,501)</b>	<b>(45,215)</b>
<b>Cash flows from financing activities:</b>												
Movement in borrowings		39,571	47,924	95,329	82,854	44,149	19,353	3,856	1,670	(2,544)	(15,345)	(17,065)
<b>Net cash flow from financing activities</b>		<b>39,571</b>	<b>47,924</b>	<b>95,329</b>	<b>82,854</b>	<b>44,149</b>	<b>19,353</b>	<b>3,856</b>	<b>1,670</b>	<b>(2,544)</b>	<b>(15,345)</b>	<b>(17,065)</b>
<b>Net increase / (decrease)</b>		<b>9</b>	<b>(61)</b>	<b>(31)</b>	<b>1</b>	<b>4</b>	<b>9</b>	<b>58</b>	<b>6</b>	<b>-</b>	<b>(2)</b>	<b>(31)</b>
<b>Cash, cash equivalents and bank overdrafts:</b>												
At the beginning of the year		102	201	140	109	110	114	123	181	187	187	185
<b>At the end of the year</b>		<b>111</b>	<b>140</b>	<b>109</b>	<b>110</b>	<b>114</b>	<b>123</b>	<b>181</b>	<b>187</b>	<b>187</b>	<b>185</b>	<b>154</b>

## Statement of accounting policies

Marlborough District Council (Council) is a unitary authority located in New Zealand that is governed by the Local Government Act 2002 (LGA). The relevant legislation governing Council's operations includes the LGA and the Local Government (Rating) Act 2002.

These prospective financial statements of Council are for the 10 years commencing 1 July 2021 and ending on 30 June 2031.

These prospective financial statements were authorised for issue by Council on 30 June 2021.

### 1. Reporting entity

The main purpose of these statements is to provide users with information about the core services that the Council intends to provide to ratepayers, the expected cost of those services and the consequent requirement for rate funding.

The level of rate funding required is not affected by Council's subsidiaries except to the extent that the Council obtains distributions from, or further invests in, those subsidiaries and such effects are included in these parent prospective financial statements. Therefore Council is not presenting group prospective financial statements as the Council believes that parent statements are more relevant to users.

These prospective financial statements therefore reflect the activities and position of Council plus Council's 88.5% share in the joint committee Marlborough Regional Forestry.

The primary objective of Council is to provide goods and services for the community or social benefit rather than making a financial return. Accordingly, Council has designated itself as public benefit entity (PBE).

### 2. Basis of preparation

These prospective financial statements have been prepared in accordance with Tier 1 PBE Accounting Standards. As a result of applying the new accounting standards, there have been no significant changes in the Council's accounting policies.

#### (i) **Statement of compliance**

The prospective financial statements of the Council have been prepared in accordance with Tier 1 PBE Accounting Standards and the requirements of the LGA and the Local Government (Financial Reporting and Prudence) Regulations 2014 which includes the requirement to comply with Generally Accepted Accounting Practice in New Zealand (NZ GAAP).

The prospective financial statements comply with PBE RFS 42 Prospective Financial Statements. The information in these prospective financial statements have been prepared using the best information available at the time they were prepared and may not be appropriate for purposes other than those described.

#### (ii) **Measurement base**

The prospective financial statements have been prepared on a historical cost basis, modified by the revaluation of certain assets.

#### (iii) **Goods and services tax**

All items in the financial statements are stated exclusive of goods and services tax (GST), except for debtors and other receivables and creditors and other payables, which are presented on a GST-inclusive basis. GST not recoverable as input tax is recognised as part of the related asset or expense.

The net amount of GST recoverable from, or payable paid to, the Inland Revenue (IR) is included as part of receivables or payables.

The net GST paid to, or received from the IR, including the GST relating to investing and financing activities, is classified as an operating cash flow in the Statement of Cash Flows. Commitments and contingencies are disclosed exclusive of GST.

#### (iv) **Cost allocation**

The costs of providing support services for each Council Activity are allocated to each Activity using direct and indirect cost allocations:

Direct costs

Direct costs are those costs directly attributable and charged to an Activity.

#### Indirect costs

Indirect costs are those costs that cannot be identified in an economical feasible manner with a specific Activity and are charged to the Activities using cost drivers such as actual usage, staff numbers and floor area.

#### (v) **Annual Plan figures**

The comparative 2020-21 figures are those approved by the Council in its 2020-21 Annual Plan. They have been prepared in accordance with NZ GAAP, using accounting policies that are consistent with those adopted in preparing these prospective financial statements.

#### (vi) **Functional and presentational currency**

The prospective financial statements are presented in New Zealand dollars and all values are rounded to the nearest thousand dollars (\$000's). The functional currency of MDC is New Zealand dollars.

#### (vii) **Changes in accounting policies**

There have been no significant changes in the accounting policies to those applied in the preparation of the financial statements for the year ended 30 June 2020.

#### (viii) **Accounting estimates and assumptions and critical judgments in applying accounting policies**

In preparing these prospective financial statements Council has made estimates and assumptions concerning the future.

The actual results achieved are likely to vary from the information presented and the variations may be material.

### 3. **Significant accounting policies**

#### (i) **Revenue**

Most of the Council's revenue is from non-exchange transactions accounted for under PBE IPSAS 23. Exchange transactions are recognised under PBE IPSAS 9. Professional judgement is exercised to determine whether the substance of a transaction is non-exchange or exchange.

For non-exchange revenue there is recognition of a liability to the extent of unfulfilled conditions.

### **Revenue from non-exchange transactions**

#### Rates Revenue

Rates revenue is a non-exchange revenue and are set annually by a resolution of Council and relate to a financial year. All ratepayers are invoiced within the financial year for which the rates have been set. Revenue is measured at the fair value of consideration received or receivable. Rates revenue is recognised by Council as being revenue when the Council has set the rates and provided the rates assessment.

#### Subsidies and grants

New Zealand Transport Agency roading subsidies (received for maintaining and constructing the roading infrastructure) and other government grants/subsidies are recognised as non-exchange revenue upon entitlement ie; when conditions relating to eligible expenditure have been fulfilled. This revenue is shown as subsidy revenue.

Other Donations and Grants include contributions received towards the upkeep of Returned Servicemen Association cemetery plots, community housing, community safety, environmental control, Three Waters Review and Shovel Ready Projects.

#### Provision of services partial cost recovery/subsidised

Revenue from a subsidised sale of services is recognised as non-exchange revenue. Revenue from a contract to provide services is recognised by reference to the outstanding obligations of the contract at reporting date at reporting date.

#### Vested assets

Assets vested in Council, with or without conditions, are recognised as non-exchange revenue, at fair value, when control over the assets is obtained.

### **Revenue from exchange transactions**

#### Development and Financial Contributions

Development and Financial contributions are recognised as exchange revenue when received. Otherwise, Development Contributions are allocated to the appropriate Reserve until Council provides, or is able to provide, the service.

#### Water Billing revenue



Water Billing is recognised as exchange revenue on an accrual basis.

#### Provision of services full cost recovery

Significant revenue from full cost recovery sale of services is recognised as exchange revenue. Revenue from a contract to provide services is recognised by reference to the stage of completion of the contract at reporting date.

#### Sales of goods

Sales of goods are recognised as exchange revenue when goods are delivered and title has passed.

#### Interest and Dividends

Interest revenue is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable. Dividend revenue from investments is recognised when the shareholders' rights to receive payment have been established.

### (ii) **Grant expenditure**

Non-discretionary grants are those grants that are awarded if the grant application meets the specified criteria and are recognised as expenditure when an application that meets the specified criteria for the grant has been received.

Discretionary grants are those grants where the Council has no obligation to award on receipt of the grant application and are recognised as expenditure when a successful applicant has been notified of the Council's decision.

### (iii) **Leases**

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

#### Operating leases

Rental revenue from operating leases is recognised on a straight-line basis over the term of the relevant lease. All operating lease contracts contain review clauses in the event that MDC exercises its option to renew. The lessee does not have an option to purchase the property at expiry of the lease period.

Rentals payable under operating leases are charged to revenue on a straight-line basis over the term of the relevant lease.

### (iv) **Cash and cash equivalents**

Cash and cash equivalents include cash on hand, balances with banks, other short-term highly liquid investments with maturities of three months or less. Bank overdrafts are shown within borrowings in current liabilities in the Statement of Financial Position.

### (v) **Debtors and other Receivables**

Short-term receivables are recorded at the amount due, less any provision for uncollectability.

A receivable is considered to be uncollectable when there is evidence that the amount due will not be fully collected. The amount that is uncollectable is the difference between the amount due and the present value of the amount expected to be collected.

### (vi) **Term deposit and bonds**

Term deposits and bonds are held to maturity investment. The carrying value of term deposits and bonds approximates their fair value.

### (vii) **Loans to subsidiaries and community organisations**

These are included in current assets, except for maturities greater than 12 months after the balance date, which are included in non-current assets.

These investments are measured at their amortised cost, using the effective interest method less impairment. Where applicable, interest accrued is added to the investment balance. Gains and losses when the asset is impaired or derecognised are recognised in the surplus or deficit.

### (viii) **Impairment of financial assets**

Financial assets are assessed for objective evidence of impairment at each balance date. Impairment losses are recognised in the surplus or deficit. Impairment is established when there is objective evidence that MDC will not be able to collect amounts due according to the original terms of the debt.

### (ix) **Investments in subsidiaries**

Investments in subsidiaries are recorded in the parent entity's financial statements at cost less any subsequent accumulated impairment losses.

**(x) Interests in Joint Committees**

Forest assets are predominantly own and managed by Marlborough Regional Forest. The forestry estate is managed through a joint committee between Council (88.5%) and Kaikoura District Council (KDC) (11.5%).

The Council's share of jointly controlled assets and any liabilities incurred jointly with KDC are recognised in the Council's financial statements on a proportionate basis and classified according to their nature.

Where Council transacts with the joint committee, unrealised profits and losses are eliminated to the extent of Council's share in the joint venture, except to the extent that unrealised losses provide evidence of impairment of the asset.

**(xi) Derivative financial instruments**

Council enters into interest rate swaps to manage interest rate risk. The Council does not use derivative financial instruments for speculative purposes.

Derivatives are initially recognised at fair value and subsequently re-measured to their fair value. Derivative instruments entered into by Council do not qualify for hedge accounting. Changes in the fair value of any derivative financial instrument that does not qualify for hedge accounting are recognised in the surplus or deficit.

**(xii) Inventories**

Inventories are stated at the lower of cost and net realisable value. Costs comprise direct materials and, where applicable, direct labour costs and those overheads that have been incurred in bringing the inventories to their present location and condition. Cost is calculated using the weighted average cost method.

Net realisable value represents the estimated selling price less all estimated costs of completion and costs to be incurred in marketing, selling and distribution. Provision has been made for obsolescence for inventories held for maintenance purposes, where applicable.

**(xiii) Non-current assets held for sale**

Non-current assets (or disposal groups) classified as held for sale are stated in the Statement of Financial Position at the lower of their carrying amount and fair value less costs to sell.

Non-current assets (including those that are part of a disposal group) are not depreciated or amortised while they are classified as held for sale. Interest and other expenses attributable to the liabilities of a disposal group classified as held for sale continue to be recognised.

**(xiv) Property, plant and equipment**

Property, plant and equipment is shown at cost or valuation, less accumulated depreciation and any impairment losses.

Council has the following classes of property, plant and equipment:

Infrastructural assets - these are fixed utility systems such as road networks, sewer systems and water systems.

Operational assets - these assets enable the ongoing operations. These include land, buildings, landfill, library books, plant and equipment and motor vehicles.

Restricted assets - These are mainly reserves that provide a benefit or service to the community and cannot be disposed of because of legal or other restrictions.

**Additions**

Additions in the periods between valuations are recorded at cost, except for vested assets. Cost represents the value of the consideration given to acquire the assets and the value of other directly attributable costs that have been incurred in bringing the assets to the location and condition necessary for their intended use. Certain infrastructural assets and land have been vested in Council as part of the subdivisional consent process. The vested reserve land has been initially recognised at the most recent appropriately certified government valuation which is their deemed cost. Vested infrastructural assets are initially valued based on the actual quantities of infrastructural components vested and the current "in the ground" cost of providing identical services and this is their deemed cost.

**Disposals**

The gain or loss arising on the disposal or retirement of an asset is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in the surplus or deficit.

When revalued asset are sold the amounts included in the revaluation reserve in relation to those assets is transferred to accumulated funds.

Revaluation of property, plant and equipment is accounted for on a class of asset basis

Land and buildings and infrastructural assets are revalued with sufficient regularity that the carrying amount does not differ materially from that which would be determined using fair values at balance date, generally every year.

The net revaluation results are included in other comprehensive revenue and expense and are accumulated to an the asset revaluation reserve in equity for that class of asset. When the revaluation decrease exceeds the asset revaluation reserve balance this decrease is recognised in the surplus or deficit. Any subsequent increase on revaluation that reverses a previous decrease in value recognised in the surplus or deficit will be recognised first in the surplus or deficit up to the amount previously expensed, and then credited to the revaluation reserve for that class of asset.

#### Depreciation

Depreciation is provided on a straight line basis on all property, plant and equipment other than land, at rates which will write off the cost (or valuation) of the assets to their estimated residual values over their useful lives. Depreciation of these assets commences when the assets are ready for their intended use. Depreciation rates and useful lives are reviewed annually. Depreciation on assets is charged to the surplus and deficit..

The useful lives and associated depreciation rates of major classes of assets have been estimated as follows:

Infrastructural assets	Life (in years)	Rate
Flood protection and controlled works (pump stations, dams)	1 - 100	1 - 100%
Roads and footpaths	1 – 110	0.9 – 100%

Infrastructural assets	Life (in years)	Rate
Sewerage network including treatment	2.5 - 100	1 – 40%
Stormwater drainage schemes	1 - 100	1 – 100%
Water supply schemes - other	1 -100	1 – 100%
Water treatment and facilities	1 -100	1 - 100%
Operational assets		
Buildings	1 - 100	1 – 100%
Landfill	3.68 – 40	2.5 - 27.2%
Library books including audiobooks	5 - 13.34	7.5 - 20%
Other structures and improvements	3.23 – 100	1 - 31%
Office equipment, furniture and fittings	3.01 – 13.33	7.5 – 33.2%
Plant, machinery and equipment	2.23 - 100 years	1 - 45%
Restricted assets		
Buildings	5 - 100 years	1 – 20%

#### Assets not depreciated

The following assets are not depreciated in line with Council's depreciation policy:

Infrastructural assets - Assets under construction, infrastructure land, sewerage oxidation ponds and roading infrastructure including land under roads, roads and carpark formation, sealed roads subbase and street berms.

Operational assets - Assets under construction, forest crops and land.

Restricted assets - Land.

#### (xv) *Intangible assets*

Software acquisition and development

Software licences are capitalised on the basis of the costs incurred to acquire and bring to use the specific software.

Costs that are directly attributable to the development of software for internal use are recognised as an intangible asset. Direct costs

include the software development employee costs and an appropriate portion of relevant overheads.

#### Carbon credits

Purchased carbon credits are recognised at cost on acquisition. Free carbon credits received from the Crown are recognised at fair value on receipt. They are not amortised, but are instead tested for impairment annually. They are de-recognised when they are used to satisfy carbon emission obligations.

#### Amortisation

The carrying value of an intangible asset with a finite life is amortised on a straight-line basis over its useful life.

Amortisation begins when the asset is available for use and ceases at the date that the asset is derecognised. The amortisation charge for each financial year is recognised in the surplus or deficit.

The useful lives and associated amortisation rates of computer software, the major class of intangible assets, is 5 to 10 years 10% to 20%.

#### **(xvi) Impairment of property, plant and equipment and intangible assets**

Property, plant and equipment that have a finite useful life are reviewed for impairment at each balance date and whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

Intangible assets that have an indefinite useful life, or are not yet available for use are tested annually for impairment.

An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of its fair value less costs to sell and its value in use.

If an asset's carrying amount exceeds its recoverable amount, the asset is regarded as impaired and the carrying amount is written-down to the recoverable amount. For revalued assets, the impairment loss is recognised against the revaluation reserve for that class of asset. When the impairment loss exceeds the balance in the revaluation reserve, the balance is recognised in the surplus or deficit.

For assets not carried at a revalued amount, the total impairment loss is recognised in the surplus or deficit. The reversal of an impairment loss on a revalued asset is credited to other comprehensive revenue and expense and increases the asset revaluation reserve for that class of asset. However, to the extent that an impairment loss for that class of asset was previously recognised in the surplus or deficit, a reversal of the impairment loss is also recognised in the surplus or deficit.

#### Forestry assets

Forestry assets are owned and managed by Marlborough Regional Forestry.

Standing forestry assets are independently revalued annually at fair value less estimated costs to sell for one growth cycle.

Gains or losses arising on initial recognition of forestry assets at fair value less costs to sell and from a change in fair value less costs to sell are recognised in the surplus or deficit.

Forestry maintenance costs are recognised in the surplus or deficit when incurred. Council owns and manage some trees for soil conservation purposes. These are revalued as per Council's policy on property, plant and equipment.

#### **(xvii) Investment property**

Investment property is property held primarily to earn rentals and/or for capital appreciation. Investment property is initially measured at cost and subsequently measured at fair value at each reporting date.

Investment properties are valued individually and not depreciated. Gains or losses arising from a change in the fair value of investment property are recognised in the surplus or deficit.

#### **(xviii) Creditors and other payables**

Creditors and other payables are non-interest bearing and are normally settled on 30 day terms, therefore the carrying value of creditors and other payables approximates their fair value.

#### **(xix) Borrowings and associated costs**

All loans and borrowings are initially recognised at fair value of the consideration received net of issue costs associated with the borrowing.

Interest rate swaps are measured at fair value with gains or losses on re-measurement recognised through the surplus or deficit.

All borrowing costs are recognised as an expense in the period in which they are incurred and are calculated using effective interest method.

**(xx) Employee entitlements**

Provision is made in respect of Council's liability for retiring gratuity allowances, annual and long service leave, and sick leave.

The retiring gratuity liability and long service leave liability are assessed on an actuarial basis using current rates of pay taking into account years of service, years to entitlement and the likelihood staff will reach the point of entitlement. These estimated amounts are discounted to their present value using an interpolated 10 year government bond rate.

Liabilities for accumulating short-term compensated absences (eg; annual and sick leave) are measured as the additional amount of unused entitlement accumulated at the balance sheet date.

A sick leave gifting policy was adopted by Council in August 2018. The value of Council's sick leave gifting has been accessed but no material impact or changes have been made to the current level of provision.

**(xxi) Provisions**

Sick leave, annual leave, vested long service leave and non-vested long service leave and retirement gratuities expected to be settled within 12 months of balance date, are classified as a current liability. Employer contributions to Kiwi Saver and the National Provident Fund are defined contribution superannuation schemes, and are expensed.

Provisions are recognised when Council has a present obligation as a result of a past event, a reliable estimate can be made for the amount of the obligation and it is probable that Council will be required to settle that obligation.

Provisions are measured at management's best estimate of the expenditure required to settle the obligation at balance date and are discounted to present value where the effect is material.

Council has responsibility under the consent to provide ongoing maintenance and monitoring services at the Blenheim landfill site after closure. To provide for these estimated costs of aftercare, a charge is made each year based on the net present value of the after care cost which it is estimated will be incurred following the closure of the landfill.

**(xxii) Contingent liabilities**

New Zealand Local Government Funding Agency Ltd (LGFA)  
Council is one of 67 Local Authority Councils participating of the LGFA.

Council is a shareholder and guarantor of the LGFA's borrowings. This is based on Council's rates as a proportion of the total rates for all guaranteeing Local Authorities. At 30 June 2020 LGFA had borrowings totalling \$11.9 billion (2018-19: \$11.9 billion).

Financial reporting standards require Council to recognise the guarantee liability at fair value. At 30 June 2020 Council's share of this guarantee was 1.2% and the fair value of the liability is expected to be less than \$1.4 million. Council has not recognised this as it is considered to be extremely unlikely to ever be called on.

**Financial guarantees**

A financial guarantee contract is a contract that requires Council to make specified payments to reimburse the holder of the contract for a loss it incurs because a specified debtor fails to make payment when due.

Council has previously served as a guarantor for community organisation's bank loans, however, there were no loans guaranteed by Council in these prospective financial statements.

**(xxiii) Equity**

The LGA requires Council to manage its revenues, expenses, assets, liabilities, investments, and general financial dealings prudently and in a manner that promotes the current and future interests of the community. Ratepayers' funds are largely managed as a by-product of managing revenues, expenses, assets, liabilities, investments, and general financial dealings.

Equity is the community's interest in MDC Group and is measured as the difference between total assets and total liabilities. Public

equity is disaggregated and classified into a number of Reserves to enable clearer identification of the special uses that Council intends to make of its accumulated surpluses.

The components of equity are:

**Accumulated funds** – these are the capital fund made up of accumulated surpluses and deficit. A surplus in any year is added to the fund and a deficit in any year and deducted from the fund.

**Ordinary Reserves** - these are Reserves created by Council decision. Council may alter the purpose of a Reserve without reference to a third party or the Courts. Transfers to and from these Reserves is at the discretion of Council.

**Restricted Reserves** - these are Reserves subject to specific conditions accepted as binding by Council and which may not be revised by Council without reference to the Courts or a third party. Transfer from these Reserves can be made by certain specified purposes or when certain specified conditions are met.

**Property Revaluation Reserves** - these relate to the revaluation of property, plant and equipment to fair value.

## 1. Summary cost of services

for the year ending 30 June:

	2021 (AP)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s
<b>Revenue:</b>											
People	11,873	20,511	14,860	14,004	14,219	14,752	15,079	15,315	15,859	16,256	16,512
Community Facilities	12,919	14,874	15,456	16,248	16,709	17,273	17,507	18,004	18,484	18,927	19,392
The Provision of Roads and Footpaths	23,015	23,695	24,364	25,003	27,762	30,722	31,859	34,713	31,823	32,903	33,925
Flood Protection and Control Works	7,998	10,620	10,075	9,862	10,175	10,552	11,183	11,672	12,065	12,447	12,798
Sewerage	12,031	16,252	14,985	16,238	17,340	18,504	19,906	21,213	22,304	23,248	23,928
Stormwater Drainage	2,512	3,596	3,776	3,919	4,062	4,181	4,335	4,642	5,174	5,558	5,715
Water Supply	9,648	12,777	12,461	13,204	13,788	14,453	15,224	16,140	16,636	17,672	18,996
Solid Waste Management	12,131	12,136	12,575	12,921	13,287	13,645	14,014	14,439	14,891	15,365	15,809
Environmental Management	10,321	12,725	13,405	13,423	13,682	13,994	14,411	14,807	14,977	15,386	15,494
Regulatory	8,750	14,177	15,634	10,836	10,320	10,539	10,762	11,108	11,405	11,726	11,996
Regional Development	5,908	6,343	6,664	6,859	6,968	8,214	8,233	7,808	7,960	8,116	8,332
<b>Total activity revenue</b>	<b>117,106</b>	<b>147,706</b>	<b>144,255</b>	<b>142,517</b>	<b>148,312</b>	<b>156,829</b>	<b>162,513</b>	<b>169,861</b>	<b>171,578</b>	<b>177,604</b>	<b>182,897</b>
Plus other income (including Forestry)	14,541	6,489	8,777	11,674	18,332	20,453	23,001	26,176	29,214	30,611	31,118
Internal Interest - Loans	(5,917)	(5,412)	(6,157)	(6,976)	(7,550)	(8,471)	(9,809)	(10,763)	(11,405)	(12,072)	(12,751)
Forestry revaluation gains	384	1,263	1,336	1,412	1,493	1,578	1,669	1,047	471	409	304
<b>Total revenue</b>	<b>126,114</b>	<b>150,046</b>	<b>148,211</b>	<b>148,627</b>	<b>160,587</b>	<b>170,389</b>	<b>177,374</b>	<b>186,321</b>	<b>189,858</b>	<b>196,552</b>	<b>201,568</b>

## 1. Summary cost of services

for the year ending 30 June:

	2021 (AP)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s
<b>Expenditure:</b>											
People	12,841	13,311	13,823	14,198	14,237	14,786	14,962	15,036	15,476	15,795	15,981
Community Facilities	13,899	14,294	14,341	14,447	14,755	15,197	15,342	15,723	16,065	16,449	16,835
The Provision of Roads and Footpaths	22,128	23,370	24,599	25,630	26,665	27,634	28,742	29,742	30,818	31,899	32,941
Flood Protection and Control Works	5,652	5,844	6,173	6,470	6,680	6,939	7,214	7,461	7,723	7,991	8,281
Sewerage	11,491	12,033	12,731	13,665	14,996	16,924	19,452	21,003	22,175	23,090	23,642
Stormwater Drainage	1,871	2,469	2,623	2,742	2,859	2,952	3,079	3,293	3,623	3,862	3,974
Water Supply	9,181	10,483	11,698	12,649	13,530	14,198	15,096	16,050	16,439	17,635	19,385
Solid Waste Management	11,163	10,852	12,809	12,921	13,261	12,661	12,935	13,252	13,590	13,930	14,230
Environmental Management	10,255	12,875	13,554	13,573	13,845	14,075	14,493	14,888	15,058	15,467	15,575
Regulatory	8,818	14,289	15,751	10,958	10,473	10,668	10,894	11,144	11,441	11,759	12,052
Regional Development	6,929	6,311	6,557	6,837	6,829	7,018	7,425	7,350	7,501	7,631	7,748
<b>Total activity expenditure</b>	<b>114,228</b>	<b>126,131</b>	<b>134,659</b>	<b>134,090</b>	<b>138,130</b>	<b>143,052</b>	<b>149,634</b>	<b>154,942</b>	<b>159,909</b>	<b>165,508</b>	<b>170,644</b>
Plus other expenditure (including Forestry)	11,991	11,803	14,810	17,462	17,912	18,372	18,764	19,168	19,437	19,356	18,993
Interest - Internal Loans	(5,918)	(5,412)	(6,156)	(6,976)	(7,550)	(8,471)	(9,810)	(10,763)	(11,405)	(12,072)	(12,751)
<b>Total operating expenditure</b>	<b>120,301</b>	<b>132,522</b>	<b>143,313</b>	<b>144,576</b>	<b>148,492</b>	<b>152,953</b>	<b>158,588</b>	<b>163,347</b>	<b>167,941</b>	<b>172,792</b>	<b>176,886</b>

Note: Under PBE IPSAS 42 para. 40 Council is required to explain the relationship between financial information presented outside the Financial Statements to that in the Financial Statements. The total Sources & applications of operating funding reported in Council's Activity and Group of Activity Funding Impact Statements, contained in each Activity section, may differ from the Revenue and Expenditure presented above as the Funding Impact Statement excludes items such as:

- depreciation;
- fair value gains/losses;
- gains/losses on disposal of property, plant & equipment;
- internal recharges; and
- provisions.

The differences are due to different reporting requirements been applied. The reporting variations between are explained in the Notes to Funding Impact Statement on page 323.



## 2. Rates revenue

for the year ending 30 June:	2021 (AP)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s
People	9,088	9,272	9,702	10,295	11,254	11,670	12,002	12,134	12,515	12,890	13,024
Community Facilities	10,030	10,690	11,155	11,854	13,303	13,853	14,065	14,508	14,931	15,318	15,723
The Provision of Roads and Footpaths	11,007	10,650	11,304	11,938	13,573	14,182	14,869	15,451	16,090	16,711	17,325
Flood Protection and Control Works	4,478	4,915	5,309	5,716	6,015	6,338	6,680	6,981	7,303	7,633	7,933
Sewerage	8,289	8,677	9,215	9,925	10,875	11,878	13,114	14,239	15,184	15,976	16,509
Stormwater Drainage	2,071	2,164	2,306	2,428	2,759	2,862	2,994	3,270	3,764	4,114	4,241
Water Supply	9,005	10,175	11,149	11,864	12,418	13,053	13,792	14,675	15,135	16,135	17,423
Solid Waste Management	3,058	2,929	3,052	3,158	3,399	3,485	3,579	3,682	3,778	3,860	3,947
Environmental Management	7,581	8,615	9,205	9,447	10,553	10,882	11,252	11,612	11,732	12,082	12,132
Regulatory	3,575	3,902	4,049	4,259	4,705	4,822	4,935	5,155	5,327	5,517	5,651
Regional Development	3,830	3,903	4,324	4,495	4,812	6,029	6,015	5,447	5,557	5,670	5,735
<b>Total activity rates</b>	<b>72,012</b>	<b>75,891</b>	<b>80,770</b>	<b>85,380</b>	<b>93,666</b>	<b>99,052</b>	<b>103,298</b>	<b>107,154</b>	<b>111,317</b>	<b>115,904</b>	<b>119,643</b>
Non-activity rates	2	2	2	2	2	2	2	2	2	2	2
<b>Total gross rates revenue</b>	<b>72,014</b>	<b>75,893</b>	<b>80,772</b>	<b>85,382</b>	<b>93,668</b>	<b>99,054</b>	<b>103,300</b>	<b>107,156</b>	<b>111,319</b>	<b>115,906</b>	<b>119,645</b>
less rates remissions	(851)	(667)	(681)	(681)	(670)	(671)	(683)	(674)	(676)	(679)	(681)
<b>Rates revenue net of remissions</b>	<b>71,163</b>	<b>75,226</b>	<b>80,091</b>	<b>84,701</b>	<b>92,998</b>	<b>98,383</b>	<b>102,617</b>	<b>106,482</b>	<b>110,643</b>	<b>115,227</b>	<b>118,964</b>

## 3. Finance revenue and finance costs

for the year ending 30 June:	2021 (AP)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s
<b>Finance revenue - interest revenue:</b>											
Term deposits and investments	1,720	2,467	4,122	5,725	6,547	6,451	6,348	6,215	6,095	5,968	5,680
<b>Total finance revenue</b>	<b>1,720</b>	<b>2,467</b>	<b>4,122</b>	<b>5,725</b>	<b>6,547</b>	<b>6,451</b>	<b>6,348</b>	<b>6,215</b>	<b>6,095</b>	<b>5,968</b>	<b>5,680</b>
<b>Finance costs - interest expense:</b>											
Total activity related interest expense	5,917	5,412	6,157	6,976	7,550	8,471	9,809	10,763	11,405	12,072	12,751
(less)/plus net external interest	(2,041)	226	2,194	3,641	3,434	2,743	1,668	1,056	531	(276)	(1,358)
<b>Total finance costs</b>	<b>3,876</b>	<b>5,638</b>	<b>8,351</b>	<b>10,617</b>	<b>10,984</b>	<b>11,214</b>	<b>11,477</b>	<b>11,819</b>	<b>11,936</b>	<b>11,796</b>	<b>11,393</b>
Bank charges on borrowings	44	44	44	45	45	45	46	46	46	47	47
<b>Net finance costs</b>	<b>2,112</b>	<b>3,127</b>	<b>4,185</b>	<b>4,847</b>	<b>4,392</b>	<b>4,718</b>	<b>5,083</b>	<b>5,558</b>	<b>5,795</b>	<b>5,781</b>	<b>5,666</b>

#### 4. Other revenue including gains

for the year ending 30 June:

	2021 (AP)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s
<b>Other revenue:</b>											
User charges	20,519	21,547	22,894	23,994	25,068	25,713	26,607	27,516	28,229	28,975	29,784
Regulatory revenues	5,175	5,393	5,522	5,624	5,354	5,450	5,554	5,674	5,793	5,917	6,046
Infringements and fines	642	970	1,001	1,030	951	978	1,006	1,035	1,064	1,096	1,127
Vested assets	1,139	1,139	1,177	1,210	1,244	1,280	1,317	1,356	1,398	1,443	1,486
Rental income from investment properties	1,978	731	761	782	811	833	865	888	921	946	982
Marlborough Regional Forestry distribution	34	-	-	-	-	-	-	1,887	3,562	3,796	3,796
Other revenue	4,088	9,499	10,612	5,771	5,534	6,683	7,732	8,168	9,041	9,540	9,609
<b>Total other revenue</b>	<b>33,575</b>	<b>39,279</b>	<b>41,967</b>	<b>38,411</b>	<b>38,962</b>	<b>40,937</b>	<b>43,081</b>	<b>46,524</b>	<b>50,008</b>	<b>51,713</b>	<b>52,830</b>
<b>Subsidies and grants:</b>											
NZTA roading subsidy	9,501	9,960	9,878	9,847	12,015	14,354	14,787	17,036	13,450	13,868	14,266
Other donations and grants	847	14,008	2,452	349	260	211	211	211	212	212	212
<b>Total subsidies and grants</b>	<b>10,348</b>	<b>23,968</b>	<b>12,330</b>	<b>10,196</b>	<b>12,275</b>	<b>14,565</b>	<b>14,998</b>	<b>17,247</b>	<b>13,662</b>	<b>14,080</b>	<b>14,478</b>
<b>Development and financial contributions:</b>											
Capital contributions	300	-	-	-	-	-	-	-	-	-	-
Development contributions	1,944	5,255	5,364	5,476	5,590	5,706	5,825	5,947	6,071	6,197	6,308
Development impact levies	100	100	103	106	109	112	116	119	123	126	130
Other contributions	244	50	52	53	55	56	58	60	61	63	65
Land subdivision revenues	984	1,771	1,807	1,843	1,880	1,918	1,956	1,994	2,034	2,076	2,117
<b>Total development and financial contributor</b>	<b>3,572</b>	<b>7,176</b>	<b>7,326</b>	<b>7,478</b>	<b>7,634</b>	<b>7,792</b>	<b>7,955</b>	<b>8,120</b>	<b>8,289</b>	<b>8,462</b>	<b>8,620</b>
<b>Gains</b>											
Gain on sale of fixed assets	4,500	-	357	22	8	13	23	12	15	14	10
Forestry revaluation gain	384	1,263	1,336	1,412	1,493	1,578	1,669	1,047	471	409	304
<b>Total gains</b>	<b>4,884</b>	<b>1,263</b>	<b>1,693</b>	<b>1,434</b>	<b>1,501</b>	<b>1,591</b>	<b>1,692</b>	<b>1,059</b>	<b>486</b>	<b>423</b>	<b>314</b>

## 5. Expenditure

for the year ending 30 June:

	2021 (AP)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s
<b>Other non-activity expenditure:</b>											
Non-activity expenditure in the Statement of Comprehensive Revenue and Expense is made of:											
Insurance	1,535	1,784	1,809	1,832	1,855	1,880	1,904	1,929	1,955	1,981	2,008
Property costs	3,753	1,736	1,716	1,736	1,440	1,460	1,453	1,428	1,457	1,423	1,420
Rate remissions as note 2	851	667	681	681	670	671	683	674	676	679	681
Other (including Forestry)	1,975	1,978	2,254	2,596	2,963	3,147	3,246	3,318	3,413	3,477	3,491
<b>Total non-activity expenditure</b>	<b>8,114</b>	<b>6,165</b>	<b>6,460</b>	<b>6,845</b>	<b>6,928</b>	<b>7,158</b>	<b>7,286</b>	<b>7,349</b>	<b>7,501</b>	<b>7,560</b>	<b>7,600</b>
Expenditure disclosures:											
Revenue and Expense includes the following amounts which are required to be disclosed separately:											
<b>Fees to principal Auditor:</b>											
Audit fees for the Annual Report	140	149	162	166	170	173	177	181	185	189	194
Audit fees for the LTP	120	-	-	126	-	-	134	-	-	144	-
Finance costs as note 3	3,876	5,638	8,351	10,617	10,984	11,214	11,477	11,819	11,936	11,796	11,393
Depreciation	27,493	28,906	32,503	34,661	36,315	37,383	39,162	41,011	42,554	44,349	45,797
Amortisation	426	437	485	528	557	508	542	562	334	331	307
Personnel costs	24,657	27,897	29,172	30,219	31,398	32,389	33,453	34,457	35,490	36,556	37,647
Grants and donations	6,549	4,493	4,028	3,548	3,550	3,550	3,587	3,628	3,635	3,667	3,722
Insurance premiums	2,798	3,126	3,191	3,248	3,311	3,371	3,434	3,506	3,574	3,650	3,726
Councillors remuneration	739	714	732	749	765	782	800	818	836	854	874
Operating leases payments	515	165	169	172	175	168	172	175	179	182	186
Loss on disposal of fixed assets	-	-	18	-	114	-	-	-	27	24	-
Investment properties direct operating expenses	90	45	47	49	50	52	54	55	57	59	61
Other operating expenses	51,791	59,942	63,243	59,284	59,894	62,154	64,387	65,925	67,925	69,782	71,770
Marlborough Regional Forestry	1,108	1,009	1,212	1,209	1,209	1,209	1,209	1,209	1,209	1,209	1,209
<b>Total expenditure disclosures</b>	<b>120,301</b>	<b>132,522</b>	<b>143,313</b>	<b>144,576</b>	<b>148,492</b>	<b>152,953</b>	<b>158,588</b>	<b>163,347</b>	<b>167,941</b>	<b>172,792</b>	<b>176,886</b>

## 6. Debtors and other receivables

as at 30 June:

	2021 (AP)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s	\$000s
<b>Non-exchange receivables:</b>											
Rates receivables	1,018	1,245	1,281	1,314	1,347	1,382	1,417	1,453	1,493	1,534	1,574
Other	2,476	629	647	663	679	697	715	733	753	774	794
GST (net)	759	1,212	1,247	1,279	1,311	1,345	1,379	1,414	1,453	1,493	1,532
<b>Total non-exchange receivables</b>	<b>4,253</b>	<b>3,086</b>	<b>3,175</b>	<b>3,256</b>	<b>3,337</b>	<b>3,424</b>	<b>3,511</b>	<b>3,600</b>	<b>3,699</b>	<b>3,801</b>	<b>3,900</b>
<b>Exchange receivables:</b>											
Trade receivables	3,516	4,566	4,699	4,819	4,939	5,068	5,197	5,330	5,476	5,627	5,773
Other	3,273	2,872	2,957	3,032	3,107	3,188	3,268	3,352	3,445	3,539	3,631
Prepayments	35	2,440	2,511	2,575	2,639	2,708	2,777	2,848	2,926	3,007	3,085
<b>Total exchange receivables</b>	<b>6,824</b>	<b>9,878</b>	<b>10,167</b>	<b>10,426</b>	<b>10,685</b>	<b>10,964</b>	<b>11,242</b>	<b>11,530</b>	<b>11,847</b>	<b>12,173</b>	<b>12,489</b>
Less provision for impairment	(13)	(11)	(12)	(12)	(12)	(13)	(13)	(13)	(14)	(14)	(14)
<b>Total debtors and other receivables</b>	<b>11,064</b>	<b>12,953</b>	<b>13,330</b>	<b>13,670</b>	<b>14,010</b>	<b>14,375</b>	<b>14,740</b>	<b>15,117</b>	<b>15,532</b>	<b>15,960</b>	<b>16,375</b>

## 7. Other financial assets

as at 30 June:

	2021 (AP)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s
<b>Current portion:</b>											
Term deposits and bonds with maturities of 4-12 months	11,263	14,299	14,299	14,299	14,299	14,299	14,299	14,299	14,299	14,299	14,299
<b>Total current portion</b>	<b>11,263</b>	<b>14,299</b>	<b>14,299</b>	<b>14,299</b>	<b>14,299</b>	<b>14,299</b>	<b>14,299</b>	<b>14,299</b>	<b>14,299</b>	<b>14,299</b>	<b>14,299</b>
<b>Non-current portion:</b>											
Term deposits and bonds and community loans with maturities 12 months plus	1,400	266	266	266	266	266	266	266	266	266	266
Community loans	14	10	6	2	-	-	-	-	-	-	-
Loan to joint venture Marlborough Regional Forestry	3,983	3,540	4,868	6,373	7,878	9,383	10,888	11,508	11,508	11,508	11,508
Loan to subsidiary MDC Holdings Ltd	69,860	82,780	136,980	185,830	205,175	193,525	182,375	171,425	158,045	147,665	137,665
Unlisted shares in subsidiaries	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
NZ Local Govt. Insurance Corp. and LGFA shares	1,453	1,453	1,453	1,453	1,453	1,453	1,453	1,453	1,453	1,453	1,453
Other shares	1	1	1	1	1	1	1	1	1	1	1
<b>Total non-current portion</b>	<b>82,711</b>	<b>94,050</b>	<b>149,574</b>	<b>199,925</b>	<b>220,773</b>	<b>210,628</b>	<b>200,983</b>	<b>190,653</b>	<b>177,273</b>	<b>166,893</b>	<b>156,893</b>
<b>Total other financial assets</b>	<b>93,974</b>	<b>108,349</b>	<b>163,873</b>	<b>214,224</b>	<b>235,072</b>	<b>224,927</b>	<b>215,282</b>	<b>204,952</b>	<b>191,572</b>	<b>181,192</b>	<b>171,192</b>

## 8. Property, plant and equipment and Intangible assets

as at 30 June:

	2021 (AP)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s
<b>Capital additions by activity:</b>											
<b>Opening value</b>	<b>1,747,404</b>	<b>1,728,925</b>	<b>1,835,118</b>	<b>1,934,990</b>	<b>2,024,954</b>	<b>2,115,846</b>	<b>2,223,404</b>	<b>2,318,950</b>	<b>2,422,906</b>	<b>2,531,465</b>	<b>2,629,725</b>
Culture and Heritage	-	2,833	1,573	-	-	-	-	-	-	-	-
Housing for Seniors	160	3,640	185	-	193	-	202	-	211	-	220
Community Support	20	53	23	24	24	25	25	26	27	27	28
Library Services	4,320	8,916	5,945	399	388	405	423	442	492	482	494
Emergency Management	9	9	9	9	81	10	10	10	11	11	11
<b>People</b>	<b>4,509</b>	<b>15,451</b>	<b>7,735</b>	<b>432</b>	<b>686</b>	<b>440</b>	<b>660</b>	<b>478</b>	<b>741</b>	<b>520</b>	<b>753</b>
<b>Community Facilities</b>	<b>8,521</b>	<b>7,093</b>	<b>6,906</b>	<b>6,657</b>	<b>4,294</b>	<b>2,005</b>	<b>2,425</b>	<b>4,428</b>	<b>3,009</b>	<b>2,191</b>	<b>2,208</b>
<b>Roads and Footpaths</b>	<b>14,017</b>	<b>17,003</b>	<b>14,895</b>	<b>13,296</b>	<b>16,677</b>	<b>20,755</b>	<b>21,360</b>	<b>24,958</b>	<b>17,826</b>	<b>18,359</b>	<b>18,890</b>
<b>Flood protection and control works</b>	<b>4,177</b>	<b>5,360</b>	<b>6,731</b>	<b>3,239</b>	<b>1,626</b>	<b>3,851</b>	<b>2,747</b>	<b>2,619</b>	<b>2,424</b>	<b>2,227</b>	<b>2,126</b>
<b>Sewerage</b>	<b>18,184</b>	<b>9,579</b>	<b>8,533</b>	<b>29,146</b>	<b>22,324</b>	<b>40,911</b>	<b>30,775</b>	<b>15,340</b>	<b>21,425</b>	<b>3,015</b>	<b>6,776</b>
<b>Stormwater Drainage</b>	<b>2,432</b>	<b>3,214</b>	<b>3,748</b>	<b>3,628</b>	<b>786</b>	<b>893</b>	<b>2,123</b>	<b>8,202</b>	<b>6,572</b>	<b>369</b>	<b>381</b>
<b>Water Supply</b>	<b>5,562</b>	<b>10,621</b>	<b>18,258</b>	<b>15,709</b>	<b>18,492</b>	<b>10,211</b>	<b>20,460</b>	<b>8,652</b>	<b>3,829</b>	<b>31,244</b>	<b>27,356</b>
<b>Solid Waste Management</b>	<b>4,286</b>	<b>2,130</b>	<b>3,235</b>	<b>3,520</b>	<b>653</b>	<b>517</b>	<b>120</b>	<b>132</b>	<b>481</b>	<b>3,176</b>	<b>3,278</b>
Environmental Science and Monitoring	454	355	345	425	662	449	462	179	185	191	197
Environmental Policy and Protection	-	-	-	-	46	-	-	-	-	-	-
Resource Consents	3	3	3	-	44	-	-	-	-	-	-
<b>Environmental Management</b>	<b>457</b>	<b>358</b>	<b>348</b>	<b>425</b>	<b>752</b>	<b>449</b>	<b>462</b>	<b>179</b>	<b>185</b>	<b>191</b>	<b>197</b>
Building Control	-	-	-	-	289	-	-	-	-	-	-
Environmental Health	3	3	4	4	31	4	4	4	4	4	4
Biosecurity	-	-	-	-	186	-	-	-	-	-	-
Harbours	792	380	269	262	278	243	249	690	260	266	186
<b>Regulatory</b>	<b>795</b>	<b>383</b>	<b>273</b>	<b>266</b>	<b>784</b>	<b>247</b>	<b>253</b>	<b>694</b>	<b>264</b>	<b>270</b>	<b>190</b>
<b>Regional Development</b>	<b>902</b>	<b>4,096</b>	<b>10,778</b>	<b>108</b>	<b>123</b>	<b>150</b>	<b>152</b>	<b>146</b>	<b>165</b>	<b>169</b>	<b>174</b>
<b>Land Development</b>	<b>700</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Information Services</b>	<b>1,742</b>	<b>1,860</b>	<b>2,020</b>	<b>1,337</b>	<b>1,152</b>	<b>1,178</b>	<b>1,204</b>	<b>1,231</b>	<b>1,258</b>	<b>1,286</b>	<b>1,316</b>
<b>Commercial Property</b>	<b>-</b>	<b>300</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Corporate services and asset management</b>	<b>-</b>	<b>50</b>	<b>51</b>	<b>52</b>	<b>997</b>	<b>55</b>	<b>56</b>	<b>57</b>	<b>59</b>	<b>60</b>	<b>61</b>
<b>Plant Operations</b>	<b>118</b>	<b>110</b>	<b>266</b>	<b>185</b>	<b>312</b>	<b>156</b>	<b>275</b>	<b>528</b>	<b>482</b>	<b>517</b>	<b>185</b>
<b>Office Services</b>	<b>100</b>	<b>270</b>	<b>251</b>	<b>105</b>	<b>289</b>	<b>110</b>	<b>112</b>	<b>115</b>	<b>117</b>	<b>120</b>	<b>122</b>
<b>Total capital expenditure</b>	<b>66,502</b>	<b>77,878</b>	<b>84,028</b>	<b>78,105</b>	<b>69,947</b>	<b>81,928</b>	<b>83,184</b>	<b>67,759</b>	<b>58,837</b>	<b>63,714</b>	<b>64,013</b>

## 8. Property, plant and equipment and Intangible assets (continued)

as at 30 June:	2021 (AP)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s
Disposal	(1,500)	-	(3,183)	(1)	(710)	8	(1)	(20)	(49)	(85)	(6)
(Less)/plus carryovers movement	1,491	(3,894)	(4,191)	(7,536)	1,773	1,557	(12,664)	8,021	16,935	-	-
Depreciation	(27,493)	(28,905)	(32,503)	(34,660)	(36,315)	(37,383)	(39,162)	(41,012)	(42,554)	(44,349)	(45,797)
Amortisation	(426)	(437)	(485)	(528)	(557)	(508)	(542)	(562)	(334)	(331)	(307)
Revaluation	32,571	61,551	56,206	54,584	56,753	61,954	64,730	69,770	75,725	79,313	81,970
<b>Closing value</b>	<b>1,818,549</b>	<b>1,835,118</b>	<b>1,934,990</b>	<b>2,024,954</b>	<b>2,115,845</b>	<b>2,223,402</b>	<b>2,318,948</b>	<b>2,422,905</b>	<b>2,531,465</b>	<b>2,629,727</b>	<b>2,729,598</b>

## 9. Creditors and other payables

as at 30 June:	2021 (AP)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s
Trade and other payables	8,235	8,969	9,230	9,465	9,700	9,953	10,206	10,467	10,754	11,050	11,337
Accrued expenses	2,085	1,821	1,874	1,922	1,970	2,021	2,072	2,125	2,183	2,243	2,301
Income in advance	2,802	3,029	3,117	3,196	3,275	3,360	3,445	3,533	3,630	3,730	3,827
Deposit	1,340	991	1,020	1,046	1,072	1,100	1,128	1,157	1,189	1,222	1,254
Related party payables	3,496	3,429	3,529	3,619	3,709	3,806	3,903	4,003	4,113	4,226	4,336
<b>Total creditors and other payables</b>	<b>17,958</b>	<b>18,239</b>	<b>18,770</b>	<b>19,248</b>	<b>19,726</b>	<b>20,240</b>	<b>20,754</b>	<b>21,285</b>	<b>21,869</b>	<b>22,471</b>	<b>23,055</b>

## 10. Borrowings

as at 30 June:

	2021 (AP)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s
People	4,292	6,355	6,696	6,412	6,117	5,810	5,491	5,159	4,813	4,453	4,079
Community Facilities	20,328	21,002	24,378	27,328	28,353	26,905	25,683	26,202	24,893	22,912	21,634
The Provision of Roads and Footpaths	9,693	12,669	14,938	16,730	18,380	19,650	20,869	21,447	21,967	22,426	22,826
Flood Protection and Control Works	2,954	5,063	8,924	11,375	12,332	15,082	16,313	17,053	18,365	19,193	20,002
Sewerage	49,126	39,767	39,356	46,409	51,442	80,273	103,229	111,419	124,978	119,568	117,811
Stormwater Drainage	170	136	101	65	29	6	1	3,848	9,826	9,475	9,110
Water Supply	20,948	23,369	32,619	39,082	44,139	45,519	56,110	59,941	58,666	84,249	105,744
Solid Waste Management	5,923	5,908	5,343	4,767	4,215	3,695	3,174	2,668	2,284	2,009	1,746
Environmental Management	350	332	313	294	274	253	231	208	184	159	134
Regulatory	633	736	797	739	797	730	738	663	585	586	523
Regional Development	11,063	14,096	22,110	20,318	18,480	21,625	20,041	18,877	17,686	16,468	15,395
Commerical Property	10,416	9,835	9,234	8,609	7,959	7,283	6,579	5,847	5,085	4,292	3,467
Plant Operations	591	554	515	475	433	389	344	297	248	197	144
Marlborough Regional Forestry	2,655	3,540	4,868	6,373	7,878	9,383	10,888	11,508	11,243	10,978	10,713
MDC Holdings Ltd financing	70,420	83,340	137,540	186,390	205,735	194,085	182,935	171,985	158,605	148,225	138,225
<b>Total loans</b>	<b>209,562</b>	<b>226,702</b>	<b>307,732</b>	<b>375,366</b>	<b>406,563</b>	<b>430,688</b>	<b>452,626</b>	<b>457,122</b>	<b>459,428</b>	<b>465,190</b>	<b>471,553</b>
<b>less internal loans</b>	<b>(42,698)</b>	<b>(52,766)</b>	<b>(38,467)</b>	<b>(23,246)</b>	<b>(10,294)</b>	<b>(15,065)</b>	<b>(33,147)</b>	<b>(35,972)</b>	<b>(40,822)</b>	<b>(61,928)</b>	<b>(85,356)</b>
<b>Total borrowings (external loans)</b>	<b>166,864</b>	<b>173,936</b>	<b>269,265</b>	<b>352,120</b>	<b>396,269</b>	<b>415,623</b>	<b>419,479</b>	<b>421,150</b>	<b>418,606</b>	<b>403,262</b>	<b>386,197</b>

## 11. Investment property

	2021 (AP)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s	'\$000s
Balance at 1 July	10,500	10,750	10,750	10,750	10,750	10,750	10,750	10,750	10,750	10,750	10,750
<b>Balance at 30 June</b>	<b>10,500</b>	<b>10,750</b>	<b>10,750</b>	<b>10,750</b>	<b>10,750</b>	<b>10,750</b>	<b>10,750</b>	<b>10,750</b>	<b>10,750</b>	<b>10,750</b>	<b>10,750</b>



## 12. Exchange and non-exchange revenue

for the year ending 30 June:	2021 (AP)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	\$'000s	\$'000s	\$'000s	\$'000s	\$'000s	\$'000s	\$'000s	\$'000s	\$'000s	\$'000s	\$'000s
<b>Non-exchange revenue:</b>											
General rates and charges	69,492	72,782	77,042	81,071	89,110	94,110	98,140	102,079	106,120	110,557	114,148
Donations, subsidies and grants	10,373	23,968	12,331	10,197	12,275	14,564	14,998	17,247	13,661	14,080	14,479
Fees and charges	17,793	18,841	19,517	20,106	20,608	21,142	21,678	22,342	22,966	23,619	24,357
Other revenue	15,280	19,911	22,221	17,471	17,198	17,738	18,142	17,914	17,803	18,049	18,311
<b>Total non-exchange revenue</b>	<b>112,938</b>	<b>135,502</b>	<b>131,111</b>	<b>128,845</b>	<b>139,191</b>	<b>147,554</b>	<b>152,958</b>	<b>159,582</b>	<b>160,550</b>	<b>166,305</b>	<b>171,295</b>
<b>Exchange revenue:</b>											
Metered water	2,522	3,110	3,730	4,311	4,558	4,944	5,161	5,077	5,198	5,349	5,498
Rentals and leases	5,905	6,365	6,800	6,959	7,098	7,234	7,629	7,907	8,077	8,243	8,409
Marlborough Regional Forestry distribuiton	34	-	-	-	-	-	-	1,887	3,562	3,796	3,796
Interest and dividends	4,715	5,066	6,568	8,512	9,741	10,654	11,627	11,870	12,471	12,861	12,573
<b>Total exchange revenue</b>	<b>13,176</b>	<b>14,541</b>	<b>17,098</b>	<b>19,782</b>	<b>21,397</b>	<b>22,832</b>	<b>24,417</b>	<b>26,741</b>	<b>29,308</b>	<b>30,249</b>	<b>30,276</b>
<b>Total revenue</b>	<b>126,114</b>	<b>150,043</b>	<b>148,209</b>	<b>148,627</b>	<b>160,588</b>	<b>170,386</b>	<b>177,375</b>	<b>186,323</b>	<b>189,858</b>	<b>196,554</b>	<b>201,571</b>

## 13. Other reserves

as at 30 June:	2021 (AP)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	\$'000s	\$'000s	\$'000s	\$'000s	\$'000s	\$'000s	\$'000s	\$'000s	\$'000s	\$'000s	\$'000s

### 13.1 Reserve funds - Council wide

#### Emergency Events Reserve

**Purpose:** Council's Emergency Events Reserve, which is part of Council's risk management strategy, exists to:

- protect Council's infrastructural assets;
- make a provision for restoration of Council's roading network in the event of extraordinary flood damage; and
- provide for the restoration of Council's Wairau floodplain river protection assets;

**Activities to which it relates:** Infrastructural Assets including the roading network and rivers.

<b>Opening balance</b>	<b>12,776</b>	<b>9,823</b>	<b>4,521</b>	<b>1,349</b>	<b>(1,382)</b>	<b>(3,017)</b>	<b>(4,214)</b>	<b>(4,508)</b>	<b>(4,330)</b>	<b>(3,809)</b>	<b>(2,632)</b>
Transfer to reserve	1,262	336	350	361	717	1,479	2,304	3,263	3,558	4,309	5,290
Transfer from reserve	(5,351)	(3,159)	(3,230)	(3,092)	(2,353)	(2,676)	(2,598)	(3,085)	(3,037)	(3,132)	(3,360)
Capex transfer from reserve	(246)	(2,478)	(292)	-	-	-	-	-	-	-	-
<b>Closing balance</b>	<b>8,440</b>	<b>4,521</b>	<b>1,349</b>	<b>(1,382)</b>	<b>(3,017)</b>	<b>(4,214)</b>	<b>(4,508)</b>	<b>(4,330)</b>	<b>(3,809)</b>	<b>(2,632)</b>	<b>(702)</b>

#### COVID-19 Rates Relief Reserve

**Purpose:** The reserve was created in 2021-31 to provide rates relief for the period of three years as part of Council's COVID-19 recovery strategy.

**Activities to which it relates:** Any Activity rated by Council.

<b>Opening balance</b>	-	-	(4,000)	(8,300)	(12,800)	(12,800)	(12,800)	(12,800)	(12,800)	(12,800)	(12,800)
Transfer from reserve	-	(4,000)	(4,300)	(4,500)	-	-	-	-	-	-	-
<b>Closing balance</b>	-	<b>(4,000)</b>	<b>(8,300)</b>	<b>(12,800)</b>	<b>(12,800)</b>	<b>(12,800)</b>	<b>(12,800)</b>	<b>(12,800)</b>	<b>(12,800)</b>	<b>(12,800)</b>	<b>(12,800)</b>

#### Forestry and Land Development Reserve

**Purpose:** Receives revenue from Marlborough Regional Forestry and from the sale of non-activity assets for funding any projects approved by Council.

**Activities to which it relates:** Any Activity approved by Council.

<b>Opening balance</b>	<b>11,022</b>	<b>13,845</b>	<b>9,388</b>	<b>4,281</b>	<b>2,389</b>	<b>1,959</b>	<b>1,607</b>	<b>1,257</b>	<b>998</b>	<b>1,254</b>	<b>1,515</b>
Transfer to reserve	7,503	-	-	-	-	-	-	3	506	510	516
Transfer from reserve	(4,039)	(1,838)	(1,033)	(500)	(211)	(131)	(130)	(42)	(30)	(29)	(39)
Capex transfer from reserve	(6,186)	(2,619)	(4,074)	(1,392)	(220)	(220)	(220)	(220)	(220)	(220)	(220)
<b>Closing balance</b>	<b>8,300</b>	<b>9,388</b>	<b>4,281</b>	<b>2,389</b>	<b>1,959</b>	<b>1,607</b>	<b>1,257</b>	<b>998</b>	<b>1,254</b>	<b>1,515</b>	<b>1,772</b>

#### Infrastructure Upgrade Reserve

**Purpose:** To be used for essential infrastructure; to assist funding of new assets (up to a maximum of 50%), and to assist the funding of significant capital upgrades which will increase the targeted level of service supplied to the community.

**Activities to which it relates:** Infrastructure such as Water and Sewerage etc, and other Activities as determined by Council from time to time.

<b>Opening balance</b>	<b>9,433</b>	<b>11,724</b>	<b>13,268</b>	<b>14,333</b>	<b>14,934</b>	<b>14,800</b>	<b>14,428</b>	<b>13,974</b>	<b>12,910</b>	<b>11,892</b>	<b>10,638</b>
Transfer to reserve	4,657	4,646	4,552	4,893	5,299	6,309	7,630	8,130	8,852	9,369	9,369
Transfer from reserve	(3,232)	(3,102)	(3,487)	(4,292)	(5,434)	(6,681)	(8,084)	(9,195)	(9,870)	(10,623)	(11,510)
<b>Closing balance</b>	<b>10,858</b>	<b>13,268</b>	<b>14,333</b>	<b>14,934</b>	<b>14,800</b>	<b>14,428</b>	<b>13,974</b>	<b>12,910</b>	<b>11,892</b>	<b>10,638</b>	<b>8,497</b>

#### Land Subdivision Reserve

**Purpose:** To provide for Development Contributions and their utilisation in accordance with the provisions of the Local Government Act 2002.

**Activities to which it relates:** Community Facilities including Reserves, Halls, Swimming Pools.

<b>Opening balance</b>	<b>3,824</b>	<b>2,545</b>	<b>1,664</b>	<b>2,077</b>	<b>2,886</b>	<b>3,837</b>	<b>4,779</b>	<b>5,694</b>	<b>6,477</b>	<b>6,999</b>	<b>7,745</b>
Transfer to reserve	3,536	2,366	2,414	2,462	2,511	2,562	2,613	2,665	2,718	2,773	2,828
Capex transfer from reserve	(2,619)	(3,248)	(2,000)	(1,653)	(1,560)	(1,619)	(1,698)	(1,882)	(2,197)	(2,026)	(1,350)
<b>Closing balance</b>	<b>4,741</b>	<b>1,664</b>	<b>2,077</b>	<b>2,886</b>	<b>3,837</b>	<b>4,779</b>	<b>5,694</b>	<b>6,477</b>	<b>6,999</b>	<b>7,745</b>	<b>9,224</b>

### Port Marlborough NZ Ltd Special Dividend Reserve

**Purpose:** Defined amounts to be available to the Blenheim Vicinity, Picton Vicinity and General Rural geographic rating areas, or the interest on any unspent balance to be used to subsidise General rates in those areas.

**Activities to which it relates:** Various.

<b>Opening balance</b>	<b>4,313</b>	<b>4,313</b>	<b>4,132</b>	<b>4,132</b>	<b>4,132</b>	<b>4,132</b>	<b>4,132</b>	<b>4,132</b>	<b>4,132</b>	<b>4,132</b>	<b>4,132</b>
Transfer to reserve	194	173	173	173	173	173	173	173	173	173	173
Transfer from reserve	(194)	(173)	(173)	(173)	(173)	(173)	(173)	(173)	(173)	(173)	(173)
Capex transfer from reserve		(181)	-	-	-	-	-	-	-	-	-
<b>Closing balance</b>	<b>4,313</b>	<b>4,132</b>	<b>4,132</b>	<b>4,132</b>	<b>4,132</b>	<b>4,132</b>	<b>4,132</b>	<b>4,132</b>	<b>4,132</b>	<b>4,132</b>	<b>4,132</b>

### Wairau Rivers Reserve

**Purpose:** Accumulates each year-end surplus or deficit from the Wairau Valley River Works rates.

**Activities to which it relates:** Rivers and Land Drainage on the Wairau Plain.

<b>Opening balance</b>	<b>263</b>	<b>(1,529)</b>	<b>(2,206)</b>	<b>(3,366)</b>	<b>(3,015)</b>	<b>(2,470)</b>	<b>(2,199)</b>	<b>(1,777)</b>	<b>(1,373)</b>	<b>(656)</b>	<b>(65)</b>
Transfer to reserve	1,233	1,124	1,169	1,201	1,228	1,265	1,283	1,331	1,385	1,414	1,449
Transfer from reserve	(444)	(551)	(562)	(584)	(574)	(557)	(549)	(534)	(520)	(492)	(470)
Capex transfer from reserve	(3,197)	(1,250)	(1,767)	(265)	(109)	(438)	(312)	(393)	(148)	(331)	(157)
<b>Closing balance</b>	<b>(2,145)</b>	<b>(2,206)</b>	<b>(3,366)</b>	<b>(3,015)</b>	<b>(2,470)</b>	<b>(2,199)</b>	<b>(1,777)</b>	<b>(1,373)</b>	<b>(656)</b>	<b>(65)</b>	<b>757</b>

### 13.2 Reserve funds - Activity specific

These reserves are "owned" by a specific activity or individual scheme etc and exist for the following purposes:

**General Reserve:** to accumulate targeted rates or other revenue for use in subsequent years.

**Depreciation Reserve:** to accumulate rates levied to fund depreciation expense, may be used to fund capital expenditure or repayment of debt raised to fund capital expenditure.

**Landfill Aftercare Reserve:** to accumulate "dump fees" charged from the operation of the landfill (or of a stage) required to fund its closure and management once it is fully utilised.

**Development Contribution Reserve:** to accumulate development and financial contributions to fund qualifying capital expenditure.

#### Landfill aftercare reserve

<b>Opening balance</b>	<b>574</b>	<b>577</b>	<b>629</b>	<b>684</b>	<b>728</b>	<b>775</b>	<b>822</b>	<b>872</b>	<b>922</b>	<b>975</b>	<b>1,029</b>
Transfer to reserve	47	53	54	45	46	48	49	51	52	54	56
<b>Closing balance</b>	<b>621</b>	<b>629</b>	<b>684</b>	<b>728</b>	<b>775</b>	<b>822</b>	<b>872</b>	<b>922</b>	<b>975</b>	<b>1,029</b>	<b>1,085</b>

#### Development Contribution reserves

<b>Opening balance</b>	<b>(1,941)</b>	<b>(2,966)</b>	<b>(1,610)</b>	<b>1,284</b>	<b>2,108</b>	<b>5,596</b>	<b>9,188</b>	<b>12,886</b>	<b>14,593</b>	<b>18,398</b>	<b>22,314</b>
Transfer to reserve	602	3,002	3,096	3,190	4,489	3,592	3,698	3,807	3,806	3,916	4,189
Capex transfer from reserve	(1,540)	(1,646)	(202)	(2,366)	(1,001)	-	-	(2,100)	-	-	-
<b>Closing balance</b>	<b>(2,879)</b>	<b>(1,610)</b>	<b>1,284</b>	<b>2,108</b>	<b>5,596</b>	<b>9,188</b>	<b>12,886</b>	<b>14,593</b>	<b>18,398</b>	<b>22,314</b>	<b>26,503</b>

Note that a new Development Contribution Policy was adopted by Council at time of completing this LTP, increasing the balance of this reserve.

Prior to the adoption of this new policy Council utilised the Infra Upgrade reserve to fund growth assets.

However, as this reserve has been rapidly consumed the additional funds available in the Development Contribution Reserve will be reallocated to fund growth assets as part of Council's 2022-23 Annual Plan

**Operational (General and Depreciation) reserves**

<b>Opening balance</b>	<b>6,378</b>	<b>13,958</b>	<b>8,603</b>	<b>730</b>	<b>(14,165)</b>	<b>(25,275)</b>	<b>(18,937)</b>	<b>(14,513)</b>	<b>(4,367)</b>	<b>12,514</b>	<b>27,894</b>
Transfer to reserve	25,055	25,621	28,743	31,592	33,016	38,493	35,091	38,369	39,431	41,208	42,780
Transfer from reserve	(7,772)	(7,936)	(9,174)	(9,866)	(9,967)	(9,650)	(10,936)	(11,461)	(11,681)	(12,059)	(12,184)
Capex transfer from reserve	(22,364)	(23,039)	(27,442)	(36,622)	(34,160)	(22,504)	(19,731)	(16,763)	(10,870)	(13,769)	(14,013)
<b>Closing balance</b>	<b>1,297</b>	<b>8,603</b>	<b>730</b>	<b>(14,165)</b>	<b>(25,275)</b>	<b>(18,937)</b>	<b>(14,513)</b>	<b>(4,367)</b>	<b>12,514</b>	<b>27,894</b>	<b>44,477</b>

**Road Funding reserves**

<b>Opening balance</b>	<b>-</b>	<b>-</b>	<b>1,586</b>	<b>3,037</b>	<b>4,516</b>	<b>4,516</b>	<b>4,516</b>	<b>4,516</b>	<b>4,516</b>	<b>4,516</b>	<b>4,516</b>
Transfer to reserve	138	1,798	1,671	1,721	151	155	159	164	168	173	178
Transfer from reserve	-	(74)	(77)	(95)	-	-	-	-	-	-	-
Capex transfer from reserve	(138)	(138)	(143)	(147)	(151)	(155)	(159)	(164)	(168)	(173)	(178)
<b>Closing balance</b>	<b>-</b>	<b>1,586</b>	<b>3,037</b>	<b>4,516</b>	<b>4,516</b>	<b>4,516</b>	<b>4,516</b>	<b>4,516</b>	<b>4,516</b>	<b>4,516</b>	<b>4,516</b>

**MRF biological assets reserve**

<b>Opening Balance</b>	<b>12,018</b>	<b>16,731</b>	<b>17,994</b>	<b>19,330</b>	<b>20,742</b>	<b>22,235</b>	<b>23,813</b>	<b>25,482</b>	<b>26,529</b>	<b>27,000</b>	<b>27,409</b>
Transfer to reserve	384	1,263	1,336	1,412	1,493	1,578	1,669	1,047	471	409	304
<b>Closing balance</b>	<b>12,402</b>	<b>17,994</b>	<b>19,330</b>	<b>20,742</b>	<b>22,235</b>	<b>23,813</b>	<b>25,482</b>	<b>26,529</b>	<b>27,000</b>	<b>27,409</b>	<b>27,713</b>

**Total movements**

<b>Opening balance</b>	<b>58,660</b>	<b>69,021</b>	<b>53,969</b>	<b>39,571</b>	<b>21,074</b>	<b>14,286</b>	<b>25,134</b>	<b>35,215</b>	<b>48,207</b>	<b>70,415</b>	<b>91,695</b>
Transfer to reserve	44,611	40,381	43,557	47,049	49,124	55,652	54,669	59,003	61,120	64,307	67,132
Transfer from reserve	(21,032)	(20,833)	(22,035)	(23,101)	(18,711)	(19,867)	(22,469)	(24,489)	(25,311)	(26,508)	(27,736)
Capex transfer from reserve	(36,290)	(34,599)	(35,921)	(42,445)	(37,201)	(24,937)	(22,120)	(21,522)	(13,602)	(16,519)	(15,918)
<b>Other reserves closing balance as shown in Equity</b>	<b>45,949</b>	<b>53,969</b>	<b>39,571</b>	<b>21,074</b>	<b>14,286</b>	<b>25,134</b>	<b>35,215</b>	<b>48,207</b>	<b>70,415</b>	<b>91,695</b>	<b>115,173</b>