

Long Term Plan 2021-31 Significant Forecasting Assumptions

Under the Local Government Act 2002, Council is required to identify the significant forecasting assumptions and risks underlying the financial estimates in its 10-year long term plan. These are important in that they provide the community with a level of transparency about decisions Council makes about service priorities, projects and funding.

Assumptions are necessary to allow Council to plan for expenditure and costs over the next ten years. They form the best reasonable basis of currently available information. Any assumptions that apply only to specific activities will be included in the discussion on that activity.

Council has made a number of assumptions about the future. These assumptions are predictions that Council will use as a basis for planning, budgeting and decision-making across the ten years of this Plan.

Table 1 below reflects uncertainties, risk and assumptions that influence our key strategies and policy being:

- Waitaki District Council Infrastructure Strategy 2021-2051
- Financial Strategy
- Revenue and Financing Policy.

Table 1: Significant Forecasting Assumptions 2021-2031

Assumption grouping	'What' – the strategic issue	Forecasting assumption/s	Risk if assumption is not correct (refer key) <ul style="list-style-type: none"> • Insignificant • Minor • Moderate • Major 	Level of uncertainty (degree of confidence/level of information) (refer key) <ul style="list-style-type: none"> • Low • Medium • High 	Potential effects and mitigation measures (on Council financial estimates)
Demographics	<p>Population profile – the demographic make-up of the community influences the services that Council provides to the local community, and how Council may empower and enable communities to express and celebrate their diverse cultural heritages.</p>	<p>In 2018, 33% of the population in Waitaki is in the 44-65 age category, 25% in the 15-39 age category, and 23% in the over 65 age category.</p> <p>The over 65 category in Waitaki is well above the New Zealand national average of 15%. The 15-39 category in Waitaki is lower than the national average of 34%.</p> <p><Stats NZ Population by age 2018></p> <p>In 2018, 3.7% of Waitaki's population were identified as being of Pacific origin. 7.9% of Waitaki's population was identified as being Maori, and 5% Asian.</p> <p>The proportion of Pacific Islanders and other migrant groups living in our community may still be underestimated, and this population will continue to rise slowly.</p> <p><Stats NZ Population by ethnicity 2018></p>	<p>Insignificant</p> <p><i>The mix of ages and ethnicities within the population is significantly different than forecast impacting on the range and type of services provided and facilitated by Council.</i></p>	<p>Medium</p>	<p>The higher proportion of people aged over 65 requires a focus on ensuring there are appropriate facilities and services for older people. In this sector of the population, many people are on fixed incomes, and management of rates affordability impacts on this group is important to Council.</p> <p>Changes to projected population may place increasing pressure on some Council services due to increased demand over time.</p> <p>Council will continue to monitor demographic change in the District and adapt or redirect activities to meet needs where possible within reasonable cost increases in population can be managed within the existing level of service.</p> <p>An underestimated Pacific population in the official statistics records may also misrepresent the make-up of the district's population, and their needs may not be met.</p> <p>It is also noted that the 2018 Census had the lowest response in fifty years and therefore the data is less complete than in previous censuses.</p>
	<p>Population growth - affects the demand for Council services and infrastructure, and the ability to cover the costs. Slower or faster population growth may impact service levels, infrastructure expansion, renewal programmes, and costs (where there is an increased or decreased rate requirement).</p>	<p>The population in the District in 2018 was 23,000 (2018 census data).</p> <p>Council is planning for an average population growth of 8% to 2043. This is part-way between the Stats NZ high and medium population projections (2018).</p> <ul style="list-style-type: none"> • The population is projected to grow by 20% to 27,600 by 2043. This represents the Statistics NZ high projection. • The population is projected to grow by 4.78% to 24,100 by 2043. This represents the Statistics NZ medium projection. • The population is projected to decline by 10.4% to 20,600 by 2043. This represents the Statistics NZ low projection. <p><Stats NZ Population growth 2018></p>	<p>Insignificant</p> <p><i>The population may change at rates different than projected. A reduction in population will impact the rating base and the ability of communities to fund services. Either scenario could result in Council's planned services not matching community requirements.</i></p>	<p>Low</p>	<p>Over or under-estimating the demand for services based on planned growth (positive or negative) can have a significant effect on financial estimates. The potential effects include:</p> <ul style="list-style-type: none"> • The availability of funding to sustain services. • Changes in estimates to reconfigure service levels, e.g. there can be an additional cost, albeit short-term, to scale back service. • Underestimated demands for service results in a 'catch-up' scenario where a Council and community face a reactive situation. Financial estimates are likely to be more robust and reliable in a planned approach. • A growth scenario is likely to have a positive impact on the rating base. <p>Council will continue to monitor population growth change in the District and adapt or redirect activities to meet needs where possible. Generally, small increases in population can be managed within existing levels of service.</p> <p>Where growth requires additional infrastructure (e.g. through subdivisions), Council can require development and financial contributions. Costs over this amount may result in additional Council expenditure.</p> <p>Council's rating base is reviewed annually.</p>

	<p>Household change – indicates what the future demand for housing stock is likely to be.</p>	<p>Council is planning for an average household change of 8% to 2043. This is part-way between the Stats NZ high and household change projections (2018).</p> <ul style="list-style-type: none"> Between 2018 and 2033, 1200 more households are anticipated (+12%). This represents Statistics NZ high projection. Between 2018 and 2033, 600 more households are anticipated (+6%). This represents Statistics NZ medium projection. Between 2018 and 2033, there is no change to household numbers anticipated (0%). This represents Statistics NZ low projection. <p><Stats NZ Households 2018></p>	<p>Insignificant</p> <p><i>Household change across the District may occur at a higher or lower rate than expected.</i></p>	<p>Low</p> <p><i>Slower rates of growth may mean some activities have overinvested in infrastructure</i></p>	<p>Council will continue to monitor household change in the District.</p> <p>Where growth requires additional infrastructure (e.g. through subdivisions), Council can require development and financial contributions. Costs over this amount may result in additional Council expenditure.</p>
Affordability	<p>Average household income – helps to inform affordability issues.</p>	<p>The average household income in Waitaki in 2018 is \$79,200. This compares to the national average of \$104,400 and 95,100 in the Otago region.</p> <p><Stats NZ Income and Earnings 2018></p>	<p>Minor</p> <p><i>Economic pressures lead to more residents defaulting on rates payments than expected. This may be exacerbated post COVID-19.</i></p>	<p>Low</p>	<p>Council is mindful of the high number of fixed income households in the District, particularly as the population is projected to continue to age.</p> <p>KiwiSaver has now been in place for 13 years and is anticipated to a positive impact on affordability, but this is not yet quantified.</p> <p>In a post Covid-19 economy, the District's ratepayer base may face even more constrained household budgets.</p> <p>The issue of affordability of services is relevant when setting fees and charges and rates.</p> <p>Council is taking a cautious approach to prospects for the district's economy, noting that the ageing demographic will mean older residents who are no longer in employment and potentially less able to afford increasing rates.</p>
Significant Assets	<p>3 waters – drinking water, wastewater and stormwater</p>	<p>Across New Zealand there has been underinvestment in three waters infrastructure along with the need for additional investment to meet improvements in national freshwater outcomes, increase resilience to climate change and natural hazards, and enhance community wellbeing. In light of this, Central government is reviewing how to improve the regulation and supply arrangements of the three waters to better support New Zealand's prosperity, health, safety and environment.</p> <p>At this stage, Council is assuming that it will continue to deliver these services over the life of this LTP, however, through the three waters review, central government has indicated its intention to provide funding to stimulate investment to enable improvements in water service delivery and support economic recovery and progress. The mix of funding will be determined by Council through a delivery plan.</p> <ul style="list-style-type: none"> Should the proposed Government reforms result in the transfer of the 3 Waters activity to an external operator, there are likely to be material consequences for Council's overall operations – financial position, financial forecasts and financial 	<p>Moderate</p> <p><i>Council may be required to undertake significant capital works in relation to drinking water.</i></p>	<p>High</p>	<p>Council has accepted and signed an MoU with central government, and is participating in exploring future service delivery options including:</p> <ul style="list-style-type: none"> Publicly owned water service delivery entities of a significant scale e.g. multi-regional with preference for a collective Council ownership. Delivery of drinking and wastewater services as a priority. Mechanisms to enable community input.

strategy. The full implications of such a significant change cannot be accurately assessed until the full scope and detail of the reforms and related financial arrangements are known.

- At 30 June 2020, the book value of assets potentially affected by the reforms was:
 - Water Supply schemes \$75m
 - Sewerage schemes \$47m
 - Stormwater/Drainage \$18m
 - Assets work in progress \$3m
 - TOTAL \$135m

- Assets included in these three categories will be revalued at 30 June 2021, and then every three years after that. Each revaluation is expected to result in significant increases in the value of the assets – over the life of this LTP, revaluations are projected to add \$62m to the total value of 3 Waters assets.

- Over the life of this LTP, Council anticipates capital expenditure amounting to:
 - Water Supply schemes \$96m
 - Sewerage schemes \$40m
 - Stormwater/Drainage \$20m
 - TOTAL \$156m

- Council uses internal loans to ensure inter-generational equity for much of the works associated with 3 Waters projects. At 30 June 2020, balances outstanding on internal loans were:
 - Water Supply schemes \$11m
 - Sewerage schemes \$2m
 - TOTAL \$13m
 - Council expects to continue to utilise internal loans for much of the capital expenditure projected in this LTP.

- Over the life of this LTP, the following operating impacts are anticipated –

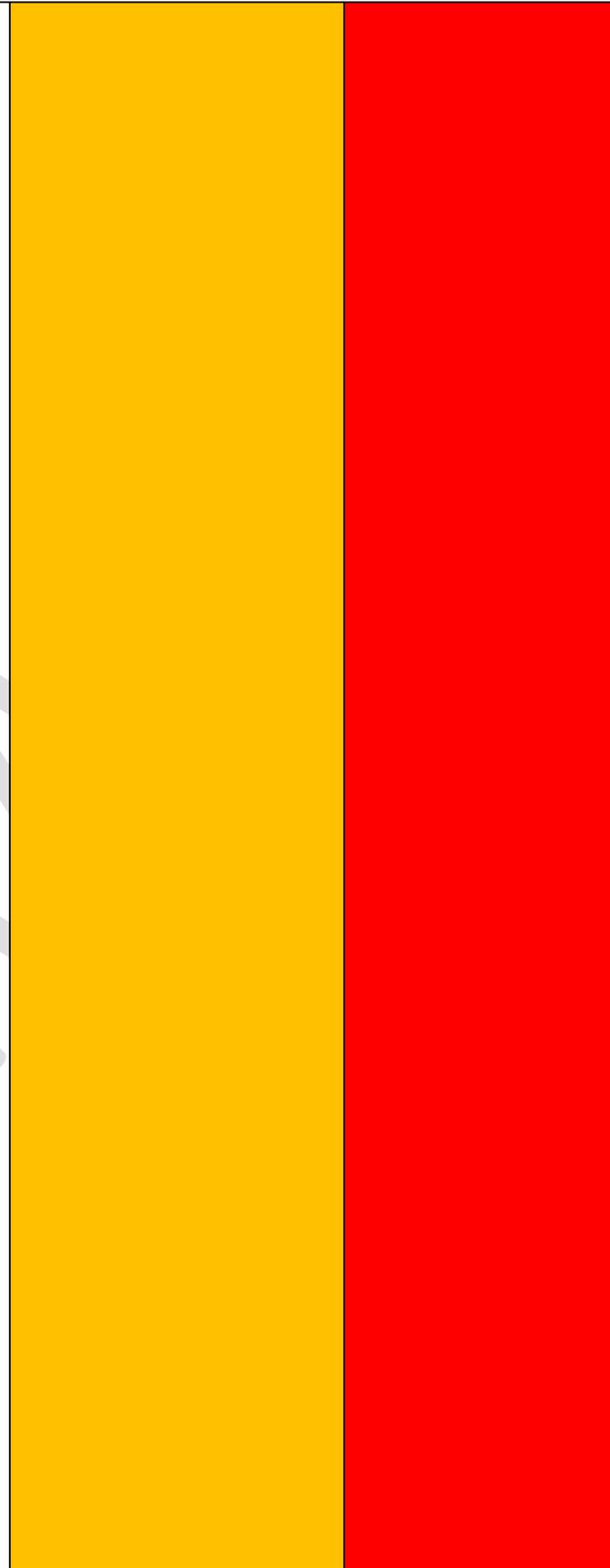
Rates income:

 - Water Supply schemes \$96m
 - Sewerage schemes \$35m
 - Stormwater/Drainage \$8m
 - TOTAL \$139m

- Operating revenue
 - Water Supply schemes \$0.5m
 - Sewerage schemes \$3.5m
 - TOTAL \$4m

- Operating expenses
 - Water Supply schemes \$44m
 - Sewerage schemes \$18m
 - Stormwater/Drainage \$0.6m
 - TOTAL \$62.6m

- Internal charges budgeted to be recovered by other business units based on timesheets and other bases



	<ul style="list-style-type: none"> o Water Supply schemes \$23m o Sewerage schemes \$11m o Stormwater/Drainage \$3m o TOTAL \$37m <ul style="list-style-type: none"> • Further information concerning the activities covered by the reforms can be found in the 3 Waters part of the significant activities section of this plan where Funding Impact Statements show forecast operating funding and application of that funding, capital expenditure and capital funding over the life of the LTP. • The proposed water reforms are expected to have potentially significant effects on other Council business units, particularly those providing support and other services to the 3 Waters business unit. The specifics of those impacts cannot yet be determined, but will be assessed by Council as part of its analysis of the final proposal when this is received. 																																															
Roading	There is a need for increased funding to maintain or increase levels of service in the roading network where possible within the NZTA approved allocation.	Moderate	Medium	<p>The Council remains of the view that the roading network is vital infrastructure and that it is important to maintain the current levels of service.</p> <p>If Council receives less subsidy from NZTA than expected, there is likely to be an increase in the level of service associated with data collection and planning, and no change to its level of service in the roading network. The increase in planning is required if co-investment from central government is limited to prioritise all work to mitigate any level of service reduction resulting.</p>																																												
Capital works – programmes and projects	Programmes and projects are delivered within budget and on time.	Moderate <i>Actual costs may vary from estimates resulting in budget shortfall.</i>	High	Projects may be carried forward if not completed as planned, and if the work is still considered to be needed. Any consistent backlog of work will have an impact on levels of service. This may result in increased costs due to inflation, possible reduction in levels of service, possible additional reactive operational expenditure.																																												
Asset depreciation rates	No changes are assumed.	Insignificant <i>Additional work on planned capital works may change depreciation expenses.</i>	Low	Asset life is regularly reviewed through asset monitoring and testing. Although depreciation rates are determined in accordance with relevant accounting policies, based on expected economic lives of individual assets, Council may resolve to not fully fund selected assets or classes of assets as circumstances dictate.																																												
Asset revaluations	<p>Asset revaluations are undertaken for key infrastructure on a rolling three yearly cycle, in the years and using the price level adjustments indicated in the table below:</p> <table border="1"> <thead> <tr> <th>Category</th> <th>2022</th> <th>2023</th> <th>2024</th> <th>2025</th> <th>2026</th> <th>2027</th> <th>2028</th> <th>2029</th> <th>2030</th> <th>2031</th> </tr> </thead> <tbody> <tr> <td>Property, Parks and Recreation</td> <td>5.5%</td> <td></td> <td></td> <td>6.0%</td> <td></td> <td></td> <td>5.4%</td> <td></td> <td></td> <td>5.1%</td> </tr> <tr> <td>Roads and bridges</td> <td></td> <td>7.4%</td> <td></td> <td></td> <td>9.1%</td> <td></td> <td></td> <td>8.9%</td> <td></td> <td></td> </tr> <tr> <td>3 Waters</td> <td></td> <td></td> <td>13.2%</td> <td></td> <td></td> <td>7.4%</td> <td></td> <td></td> <td>9.9%</td> <td></td> </tr> </tbody> </table>	Category	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Property, Parks and Recreation	5.5%			6.0%			5.4%			5.1%	Roads and bridges		7.4%			9.1%			8.9%			3 Waters			13.2%			7.4%			9.9%		Minor <i>Periods of high inflation or changes in technology may affect the value of assets (and therefore depreciation and rates) requiring revaluations outside of the normal cycle.</i>	Low	Revaluations take place regularly. Fair value of assets is assessed annually between the regular three-yearly revaluation cycle to ensure that values are not overstated
Category	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031																																						
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	<p>Asset replacement and useful life</p>	<p>Council infrastructure is aging and will require ongoing renewal and upgrades. Assets will be replaced at the end of their economic life.</p> <p>Asset information is reliable and reflects the condition and performance of the assets. Useful lives of significant assets are detailed in Asset Management Plans (AMPs) which provide information to support the replacement and renewal of Council infrastructure.</p> <p>Significant assets will not fail earlier than estimated.</p>	<p>Moderate</p> <p><i>Council's renewal profiles may be inaccurate.</i></p> <p><i>Asset lives may be shorter than expected. There may be inadequate replacement reserves.</i></p>	<p>Low</p>	<p>Asset Management Plans and data are regularly reviewed and updated. Assumptions on asset lives are independently reviewed as part of the revaluation process. If assets require replacement more quickly, capital expenditure projects may need to be brought forward.</p> <p>Asset life is reviewed regularly through asset monitoring and testing. Council has the ability to bring capital projects forward if assets wear out earlier than projected. Mitigation may involve reprioritising the capital expenditure programme.</p>
	<p>Sources of funds for future replacement of significant assets</p>	<p>Council will 'cash-fund' depreciation on assets, particularly those with significant intergenerational equity, including:</p> <ul style="list-style-type: none"> • Water Sewer and Stormwater infrastructure. • Roading network. • Council operational properties. • Computer and other key Council systems. <p>In other cases, depreciation will not be cash funded, for example on community buildings and harbour structures. Council may also resolve not to cash-fund depreciation in instances where there are sufficient reserves on hand or for other reasons.</p> <p>Council maintains various reserve funds for cash funded assets. These include bequests, depreciation or asset renewal reserves, financial contribution reserves, and development contribution reserves. These are used when projects meet specific criteria. Council will borrow if there is a shortfall in the total funding required.</p>	<p>Moderate</p> <p><i>The risk that the cost of replacing significant assets materially exceeds the level of depreciation and forecast borrowing. Risk associated with borrowing includes exposure to future interest rates, access to funding, and the rating base servicing depreciation funds.</i></p>	<p>Medium</p>	<p>Council models renewal requirements and associated expenditure. If the asset replacement proves more expensive than the forecast, further borrowing will be required.</p>
	<p>Resource consents</p>	<p>Council is anticipating upcoming renewal requirement for resource consents e.g. Sewerage wastewater treatment and disposal.</p>	<p>Minor</p> <p><i>Conditions of resource consents altered and significant new compliance costs or consents cannot be renewed as expected.</i></p>	<p>Medium</p>	<p>Budgets are in place for renewal of resource consents.</p>
	<p>Technology</p>	<p>Advances in technology over the life of the plan could change the way activities are carried out, the forecasts are based on known technology as currently applied within Council.</p>	<p>Insignificant</p> <p><i>The economic lives of network assets (particularly wastewater) may change due to future technologies that remove the need for a reticulation network.</i></p> <p><i>New technology could change the way activity is carried out, affecting both financial estimates and levels of service.</i></p>	<p>Low</p>	<p>The impact of changing technology is unknown but is reviewed on an ongoing basis and would be considered in the next Long-Term Plan. The effects in the interim would be considered in Annual Plans and provided for where necessary.</p>

Organisation	Council political structure	There are no anticipated changes to Council's political structure.	Insignificant	Low	Formal reviews will be undertaken through representation review processes or formal processes driven either by the community, Council or central government.
	Resource constraints, procurement of contractors, human resources and materials	The ability to procure contractors and human resource for Council may be diminished due to other work underway in the district and surrounds. The supply of skilled persons in some areas of Council is limited across the whole of New Zealand, and not just in the Waitaki District. The impacts of COVID-19 may shift the demand of contractors.	Moderate <i>May disrupt delivery of established levels of service.</i>	Medium	Council and its Management Team review its budget annually through the Long-Term Plan/Annual Plan process and can adjust work programmes/budgets as necessary.
	Levels of service	Levels of service will be maintained unless otherwise stated for the duration of the 2021-2031 Long Term Plan.	Moderate <i>External factors such as increased uncertainties post COVID-19 may influence levels of service discussion.</i>	Medium	Service levels may need adjusting in response to issues identified by the community or other external factors. Council and its Management Team review its budget annually through the Long-Term Plan/Annual Plan process and can adjust work programmes/budgets as necessary.
	Costs	Costs are anticipated to be stable over the lifetime of the Plan based on historical trends. Capital expenditure estimates are based on Council's best estimates and known planned expenditure.	Minor <i>Costs are higher or lower than expected e.g. contracting costs, resource costs.</i>	Low	Council and its Management Team review its budget annually through the Long-Term Plan/Annual Plan process and can adjust work programmes/budgets as necessary.
	Technology	Changes in technology will impact on the delivery of key activities e.g. Online Council meetings, more information available on-line. There will be likely greater access to fibre connectivity resulting in greater use of online digital services. There may be less demand for face-to-face customer service. Artificial intelligence is likely to alter the way Council delivers its services.	Insignificant	Low	Council will continue to monitor the impacts of technology on activities and services.
	Debt levels	Council has determined that membership of the Local Government Funding Agency will enable it to access necessary external funding to ensure that key projects and operations can progress	Minor <i>Debt levels differ from forecast due to increased uncertainty in the economy post COVID-19</i>	Medium	To achieve desired outcomes for the communities of the Waitaki District, Council has determined that it is desirable to undertake a programme of external borrowing for cash flow requirements. Borrowing requirements are strictly monitored and reported on a regular basis. Refer to the Liability and Investment Management Policy.
	Return on investments	Returns from bank deposits and other investments are expected to remain depressed over the term of the LTP. Interest rates projected in this LTP range from 2.65% to 5% over the life of the plan. Over the same period, dividends from CCO's are expected to remain steady. The focus of the forestry activity over the term of the LTP will be on re-establishing Council's forestry holdings for future harvesting.	Moderate <i>Interest rates may vary from those projected.</i>	Medium	Forecast returns may vary from forecast. Refer to investment portfolio breakdown.
	Credit availability	Credit will be available if required on competitive terms and conditions.	Insignificant	Low	Credit may not be obtained when required and funding is required from another source. Council will continue to maintain prudent debt levels.

	Borrowing costs	Council expects to borrow externally over the life of the Plan in order to provide adequate funding to progress capital projects for the benefit of its communities. Council also utilises internal debt and expects to charge interest at rates that range from 2.9% to 3.75% over the life of this LTP.	Moderate	Low	Aside from planned borrowing, Council may also need to borrow externally for unanticipated events e.g. sudden and material service level failure and/or rates of borrowing are higher than forecast. Council would first consider internal loan funding using reserve funds or using overdraft facilities, depending on its assessment of the viability of the options available. Refer to the Liability and Investment Management Policy.
	Insurance costs and natural disaster financing	Insurance costs - Insurance premiums will continue to rise at rates in excess of inflation to take into account the effects of previous earthquake and weather events on the insurance industry nationally. Council will continue to be able to obtain 100% cover. The Local Authority Protection Programme Disaster Fund will continue; and the scope of asset insurance will not extend beyond the current scope of activities and insurance cover. Council adjusted its approach post the Canterbury earthquakes and continues to monitor and assess its exposure to risk in this area.	Insignificant <i>Premiums could increase above inflation and/or Council cannot get 100% cover. Any increase in premiums above the level assumed will have an impact on rates.</i>	Medium	Council will continue to monitor insurance costs and may need to make decisions about cover levels during the life of the Plan.
External factors	Coronavirus (COVID-19) pandemic response and recovery	The BERL mid-scenario anticipates a gradual economic recovery from the September quarter 2020, reaching pre-COVID-19 levels of activity by early 2022. BERL also predicts that while New Zealand remains at alert level 1, employment levels in the accommodation, food services, arts and recreation services (tourism sector) are predicted to be around 30 percent lower than pre-COVID levels. This could be until mid-2022. The medium-long term impacts of COVID-19 remain largely unknown. Economic <ul style="list-style-type: none"> Some businesses could close permanently and there may be an economic recession. The unemployment rate can be expected to remain elevated for an unknown time period. Social <ul style="list-style-type: none"> Older persons are particularly susceptible to the risk of infection from COVID-19. Health and economic impacts of the virus may be borne disproportionately by poorer people. Refugees, migrants, or displaced persons also stand to suffer disproportionately both from the pandemic and its aftermath. Possible increase in mental health issues, heart attacks, strokes and general health issues induced by stress and/or loss of wealth, long-term health problems. Continued use of new technology to stay in contact. Need to strengthen social ties. Provision of remote access for workers. 	Moderate <i>COVID-19 is a new virus, and its long-term effects are unknown.</i>	Medium	Council will facilitate and support the District's recovery in a fair, sustainable and integrated way. The financial impact of COVID-19 will continue to affect Council's financial results in some areas especially those associated with tourism however due to a strong primary sector the Waitaki District is faring better than expected and will continue to do so. It is expected that most of Council's revenue streams will be back to normal levels by 2022 assuming that there will be no more nation-wide lockdowns. The following initiatives have already been introduced by Council in response to mitigate the effects of the COVID-19 outbreak: <ul style="list-style-type: none"> An average zero percent rates change for 2020/21. A Council support and stimulus funding package (up to \$2 million) including: <ul style="list-style-type: none"> A Mayoral Relief Fund - individual welfare requests from individuals/ families. An Economic Resilience Fund - financial support for new projects which can demonstrate an economic benefit. A Community Resilience Fund - financial support for new projects which can demonstrate a broader community benefit. A reduction in rentals for tenants of Council managed property who are demonstrating financial hardship from COVID-19. A new Community Recovery Coordinator position at Council to assist Waitaki in recovering from COVID-19 (fixed term 2020-2021).

		<ul style="list-style-type: none"> Increased demand for community-led development and seeking new opportunities in light of the challenges now faced. <p>Environmental</p> <ul style="list-style-type: none"> Environmental legislation/reforms could be delayed e.g. national policy standards change, national three water regulations, Resource Management Act. 			<ul style="list-style-type: none"> Free car parking in Oamaru (March – September 2020). A “buy local” campaign. A Tourism Waitaki campaign “We Are Missing You” to attract tourism. As an organisation we have become more digital – wherever possible our staff are able to work from home. This means that in the event of another lockdown we can continue providing services to our community. We will continue to be cautious about how much debt we take on. We have continued and will keep up with our Capital works programme, taking advantage of the Government’s shovel ready and stimulus funding. This benefits our community by supporting the local economy.
	<p>Climate change Anticipated changes in temperature, rainfall and sea level rise due to climate change will impact on Waitaki’s social, economic and environmental outcomes. These impacts will influence Council decisions around land use, regulation, investments in infrastructure, and associated adaptation and mitigation measures to counteract the effects of climate change. The key service requirement relates to protection of Council owned assets vulnerable to coastal erosion, in particular, the local roading network and Council’s stormwater infrastructure.</p>	<p>As Waitaki is situated in both the Otago and Canterbury regions, climate change projections have been included for both regions.</p> <p>Otago Regional Council projections mainly relate to coastal areas of the district, except those areas inland from Palmerston to the border of the Central Otago District. Environment Canterbury projections mainly relate to inland areas of the district.</p> <p>The scenarios are a range using the RCP4.5 (mid-range scenario where greenhouse gas concentrations stabilise by 2100), and RCP8.5 (‘business as usual’ scenario with greenhouse gas emissions continuing at current rates) calculated on a 1996-2005 baseline year.</p> <p>Sea-level rise: Otago</p> <ul style="list-style-type: none"> 0.19m to 0.27m by 2040 0.49m to 0.9m by 2090 <p>Maximum mean temperature:</p> <ul style="list-style-type: none"> Oamaru – currently 15.7°C (+0.8 to +0.9 for 2040 and +1,2 to +2.5 for 2090). Otago region + 0.5-1.5°C for 2040 and +1 to +4 for 2090. Western Canterbury (inland areas of Waitaki District) +5.0-6.0°C in spring and summer by 2090. Canterbury region +0.5-2.0°C by 2040 and +1.0-5.0°C by 2090. <p>Minimum mean temperature:</p> <ul style="list-style-type: none"> Oamaru - currently 5.7 °C (+0.4 to +0.5 °C in 2040 and 0.7 to 1.3°C in 2090). Otago region +0-1.0°C by 2040 and + 0.5 to + 2.0°C by 2090. Canterbury region +0-1.0°C by 2040 and +0.5-2.5°C by 2090. 	<p>Moderate</p> <p><i>Negative effects associated with climate change may occur at a faster rate and with more detrimental effects.</i></p> <p><i>Risk based insurance may influence investment in built development in higher risk areas.</i></p>	<p>Medium</p>	<p>Council will utilise guidance from central government (Ministry for the Environment), regional councils, NIWA and LGNZ based on the best available climate science to underpin our planning.</p> <p>If projections are not considered in Council planning, this could impact on the development of capital expenditure projects.</p> <p>Greater than projected climate change will require Council to accelerate its climate change mitigation and adaptation plans.</p> <p>Council will continue to monitor and consider the impacts of climate change and respond to changes required to Council’s infrastructure (including mitigation and adaptation). Through its Infrastructure Strategy 2021-51, Council will develop a coordinated response to adapt to the effects of climate change on its assets.</p> <p>Planning for key infrastructure located on the coastal fringe and vulnerable to coastal erosion is considered in the 30 to 50-year infrastructure planning horizon. Financial estimates include provision for Council assets and sites that may be affected. New developments will be undertaken with a view to mitigating exposure to natural disasters.</p> <p>Council will implement the Civil Defence regional model introduced in 2017 to best effect.</p> <p>Council has increased its disaster fund capacity and has the ability to deal with adverse weather events.</p> <p>Council has developed a Business Continuity Plan. If an event were to occur, Council will focus its operational resource on response and recovery.</p>

Extreme hot days per annum:

- Oamaru – currently 1.3; **(+0.9 to +1.6 for 2040 and +2.1 to +5.3 for 2090).**
- Coastal Otago **(+0.1 to 4 days to 2090).**

Number of frost days per year (days <0°C):

- Oamaru – currently 43.1 **(-7 to -9 for 2040, -11.5 to -17.9 for 2090).**
- Otago region - **10-15 fewer frost days per year by 2040, and 20-40 fewer frost days per year by 2090.**
- Canterbury region – (-10 to 30 frost days per year for inland areas by 2040; -20 to 50 frost days for inland areas by 2090).

Rainfall:

Total rainfall:

- Oamaru currently 523mm/year; **(+4% to +5% for 2040; +5% to +15% for 2090).**
- Otago region **+0-10% for 2040 and +10-20% for 2090.**
- Canterbury region **-0 to 10% for the Mackenzie Basin by 2040; Seasonal: winter +15 to 40% by 2090; summer +5 to 15% for some inland areas by 2090 whereas some other inland areas will see a decrease of 5 to 15%.**

Heavy rainfall days:

- Oamaru currently 2.1; **(+0.1 to 0 for 2040; +0.3 to +0.7 for 2090).**
- Otago region **+0 to 1 day per year for 2040 and 2090.**

** Heavy rainfall = above 25 mm in one day*

Rainfall depth

6-hour rain event with a 50-year ARI:

- Oamaru currently 66.2; **(71.8 to 72.6 for 2040; 75.3 to 85.5 for 2090).**

24 hour duration rainfall for a 24-hour rain event with a 100-year ARI:

- Oamaru currently 141; **(150 to 151 for 2040; 155 to 172 for 2090).**

Dry days:

- Oamaru currently 280 per year; **(-2 for 2040; -2 to -7 for 2090).**
- Otago region coastal areas **(1-4 fewer dry days by 2040 2-6 fewer dry by 2090).**

** Dry days = < 1 mm of rainfall is recorded*

Snowfall:

Otago

- Significant decreases in seasonal snow.
- Duration of snow cover decreasing.
- Earlier spring melts – larger winter floods.

	<p>Canterbury</p> <ul style="list-style-type: none"> • Less across region especially in mountainous areas. • Significant decreases in seasonal snow. • Duration of snow cover decreasing. <p>Sources:</p> <ul style="list-style-type: none"> • NIWA Climate change projections for the Canterbury Region prepared for Environment Canterbury, February 2020; • NIWA Climate change projections for the Otago Region prepared for Otago Regional Council, October 2019; • Ministry for the Environment Climate change Guidance for Local Government – Otago and Canterbury regions. <p>Coastal inundation:</p> <ul style="list-style-type: none"> • Significant coastal inundation hazard limited to Kakanui. <p>Coastal erosion: (coastal erosion hazard zone defined using a projection of the future shoreline position over 100 years taking into account historical retreat rates, sea-level rise and slope failure)</p> <ul style="list-style-type: none"> • More than 60% of the coast in the district is retreating at a rate of 0.15 m/y or more. • Conservative estimates: CHZ50 (50 year predicted shoreline retreat) most common width between 5 and 15 m. • Continued erosion expected at the current hotspots of Katiki Beach, Beach Road, Kakanui, North Oamaru, and Kaika and Karita settlements. • North of Hampden 2.0 m/y. • Kakanui spit tip 1.3 m/y. • North of Oamaru, the entire coastline is retreating at rates between 0.3 and 0.9 m/y, 0.4 m/y near Waitaki Boys High School, 0.35 m/y near Foyle Street, and 0.3 m/y near Weaver Street. • Kakanui gravel barrier 0.7 m/y. • Southern portion of Beach Road - average rate of 0.38 m/y. • Southern portion of Katiki Beach, alongside SH1, 0.4 – 0.6 m/y. <p>Source:</p> <ul style="list-style-type: none"> • Coastal erosion and inundation projections sourced from NIWA "Waitaki District Coastal Hazards, Prepared for the Otago Regional Council, January 2019." 			
Emissions trading scheme	<p>The Emissions Trading Scheme is retained in its present form.</p> <p>Changes could occur to the scheme via Government policy. Council financial forecasts that embody carbon pricing would be affected.</p>	Insignificant	Low	<p>Forestry assets are maintained with a long-term view and programmes are regularly reviewed. Council will replant harvested forests to negate any liability.</p> <p>Council will monitor waste volumes on an ongoing basis.</p>
Tourism numbers and composition - Influence the demand for, and type of services required e.g. transport	<p>Overseas visitor numbers (28% of tourists to the District) are projected to remain low over the first part of the 2021-31 LTP following the impact of COVID-19. Domestic numbers (72%</p>	Moderate	Medium	<p>Council, in conjunction with Tourism Waitaki will continue to monitor and report tourism trends.</p>

	infrastructure, communications, regulation and enforcement, sanitation services, and Council's Funding Policy.	of tourists to the District) are projected to remain constant or slightly increased over the same period.	<i>A radical decrease in visitor numbers would impact on the local hospitality industry. A decrease in the district's GDP would heavily influence Council decisions on current and future service levels.</i>																																																																								
	Legislative changes and environmental standards	Council assumes there will be changes to legislation over the period of this LTP, e.g. through the resource management reforms, 3Waters reforms. Regional council policy frameworks are subject to change as regional policy statements and plans are reviewed and amended. The amendment to the Climate Change Response (Zero Carbon Bill) may alter the delivery of Council activities.	Moderate <i>The impact of government legislation is usually anticipated and well signalled.</i> <i>New legislation and regional government may alter the scope and nature of some Council activities.</i>	Medium	Council may be required to change expenditure or income (for instance rates or user charges). An example could be a sudden and un-signalled change to superannuation. Council must continue to meet regional council obligations including higher environmental standards for air and water. Asset management plans will be updated. New consent requirements from regional councils will be factored in to proposed works.																																																																						
	Inflation	Inflation rates may vary from those forecasted resulting in changed revenue and expenditure. Inflation rates used for periods beyond 2020/21 have been based on data sourced from Local Government Cost Adjuster Forecasts issued by BERL in September 2020, using BERL's "mid-scenario", which assumes a rebuild after Covid-19 that is neither "stalled" nor "faster", as detailed below. <table border="1"><thead><tr><th>Category</th><th>2023</th><th>2024</th><th>2025</th><th>2026</th><th>2027</th><th>2028</th><th>2029</th><th>2030</th><th>2031</th></tr></thead><tbody><tr><td>Water, sewer, drainage and waste</td><td>3.4%</td><td>2.1%</td><td>2.3%</td><td>2.6%</td><td>2.3%</td><td>3.0%</td><td>3.3%</td><td>3.3%</td><td>2.7%</td></tr><tr><td>Planning and regulation</td><td>2.5%</td><td>2.3%</td><td>2.2%</td><td>2.2%</td><td>2.2%</td><td>2.2%</td><td>2.2%</td><td>2.2%</td><td>2.2%</td></tr><tr><td>Roading</td><td>3.1%</td><td>3.0%</td><td>2.9%</td><td>2.9%</td><td>2.9%</td><td>2.9%</td><td>2.9%</td><td>2.9%</td><td>2.9%</td></tr><tr><td>Local government administration</td><td>2.0%</td><td>2.0%</td><td>1.9%</td><td>1.8%</td><td>1.8%</td><td>1.7%</td><td>1.7%</td><td>1.7%</td><td>1.6%</td></tr><tr><td>Transport</td><td>2.6%</td><td>2.4%</td><td>2.4%</td><td>2.4%</td><td>2.4%</td><td>2.4%</td><td>2.4%</td><td>2.4%</td><td>2.4%</td></tr><tr><td>Salary and wage rates - local govt sector</td><td>3.9%</td><td>3.0%</td><td>3.2%</td><td>3.5%</td><td>3.7%</td><td>3.8%</td><td>3.9%</td><td>4.1%</td><td>4.2%</td></tr></tbody></table>	Category	2023	2024	2025	2026	2027	2028	2029	2030	2031	Water, sewer, drainage and waste	3.4%	2.1%	2.3%	2.6%	2.3%	3.0%	3.3%	3.3%	2.7%	Planning and regulation	2.5%	2.3%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	Roading	3.1%	3.0%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	Local government administration	2.0%	2.0%	1.9%	1.8%	1.8%	1.7%	1.7%	1.7%	1.6%	Transport	2.6%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	Salary and wage rates - local govt sector	3.9%	3.0%	3.2%	3.5%	3.7%	3.8%	3.9%	4.1%	4.2%	Insignificant	Low	Council and its Management Team review budgets annually through the Long-Term Plan/Annual Plan process and can adjust work programmes/budgets as necessary.
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	Interest rates on borrowing	Interest rates will not rise significantly. They are assumed to be between 0.9 and 2.10% over the period of the LTP. Forecast interest rates on borrowing may be higher or lower than forecasted. Council costs could increase or decrease as interest rates fluctuate up and down.	Insignificant	Low	Council hedges interest rate exposure as per the Liability and Investment Management Policy.																																																																						
Funding sources	New Zealand Transport Agency (NZTA) financial assistance	Council currently undertakes its roading programme based on a contribution from our ratepayers and a contribution from government through the NZTA. The subsidy provided by NZTA (57%) has increased for the next three years starting from 2022, and Council has assumed for the purposes of this LTP that the new rate will remain unchanged over the term of the LTP.	Minor <i>Changes in central Government funding for roading could impact on Council's contribution to its roading programme.</i>	Low	Council and its Management Team review its budget annually through the Long-Term Plan/Annual Plan process and can adjust work programmes/budgets as necessary.																																																																						
	External funding opportunities	Council will take advantage of external funding opportunities through the Local Government Funding Agency where appropriate to top up the ratepayer base.	Insignificant <i>Significant changes in funding or funding sources may result in a revised capital work programme or changes in levels of service.</i>	Low	Refer to the Revenue and Financing Policy.																																																																						
	Revenue	Council will continue to generate revenue from the key areas of rates, regulatory, grants, subsidies, interest, dividends, investments, although some revenue sources may be lower due to the impacts of COVID-19 in the first 1-2 years of the LTP.	Insignificant <i>The level of revenue is not received or budgeted and debt levels, interest costs and rates requirements will be higher than planned.</i>	Low	Refer to the Revenue and Financing Policy.																																																																						

	Co-funding arrangements	It is assumed that, where projects are reliant on other partners contributing some or all of the funding, this funding will still be available. Council will seek external funding where possible.	Moderate <i>Partners may no longer be in a position to provide funding which will result in an increased level of input from Council, or the termination of a project.</i>	Medium	Council will continue to monitor and consider its ongoing funding commitment as the need arises.
	Development and financial contributions	Assumptions on development contributions are included in the updated Development and Financial Contributions Policy. Development contribution income is included in financial forecast statements for all asset groups.	Insignificant <i>The level of development contributions collected could be insufficient to cover the costs of required growth infrastructure.</i>	Low	Costs for infrastructure may need to be met from other allocations. Council will continue to refine cost estimates through the implementation of an updated Infrastructure Strategy. Council and its Management Team review its budget annually through the Long Term Plan/Annual Plan process and can adjust work programmes/budgets as necessary.
	Return on investments	The return on investments and retained earnings on subsidiaries will continue at current depressed levels over the first few years of the LTP	Insignificant <i>Returns lower than expected would impact on Council's ability to fund services and infrastructure and would likely require an increase in rates.</i>	Low	There is an expectation when agreeing on annual performance that higher returns will be generated.
	CCO Income	Dividend income will be received at the levels forecast in this plan.	Moderate <i>Whitestone Contracting Ltd may deliver a lower than projected dividend and Council will need to source additional funding</i>	Medium	Council and its Management Team review its budget annually through the Long-Term Plan/Annual Plan process.
	LGFA - New Zealand Local Government Funding Agency Scheme Council joined this scheme in 2020	Council will secure additional funding at the lowest possible cost, providing greater certainty and duration of funding. The interest payable on the LGFA loans is expected to average between 0.9% and 2.1% over the life of the LTP.	Insignificant <i>Other borrowing sources will be available, but not necessarily at the lowest rate possible.</i>	Low	Council and its Management Team review its budget annually through the Long-Term Plan/Annual Plan process.
Councils strategic direction	Council's strategic direction influences the way Council delivers services and infrastructure to Waitaki's residents. The strategic priorities are: <ul style="list-style-type: none"> • Providing high quality core infrastructure and services • Determining the best way to deliver 3Waters for the community • Working with the community to respond to COVID-19 challenges • Creating a District Plan that is fit for the future • Striving towards better Council performance • Driving best value for rates 	Council's strategic direction will remain constant in years 1-3 of the LTP.	Insignificant	Low	Council can change direction at any point and invest in activities focused on attracting residents, business, and/or visitors. There would be a short-term cost associated with staff redundancies and this expense would need to be included in future financial estimates.

Risk thresholds for significant forecasting assumptions

	Insignificant	Minor	Moderate	Major
Strategic	<ul style="list-style-type: none"> No significant adverse public comment. No impact on achievement of LTP objectives. Key stakeholder relationships unaffected. 	<ul style="list-style-type: none"> Adverse comment in local or social media. Letter to CEO, complaints to Councillors. May slow achievement of LTP objectives. Minor impact on key stakeholder relationships. 	<ul style="list-style-type: none"> Local or regional media coverage. Will impact achievement of one or more LTP objectives. Negative impact on key stakeholder relationships. 	<ul style="list-style-type: none"> National media coverage. Will significantly impact the achievement of multiple LTP objectives.
Operational	<ul style="list-style-type: none"> No loss of operational capacity. Minimal change to service levels. Minimal loss of internal capacity. 	<ul style="list-style-type: none"> Loss of operational capability in some areas. Some disruption to service levels. Internal capacity lost for up to 4 weeks. 	<ul style="list-style-type: none"> Serious loss of operational capacity for 6 + weeks. Disruption to service levels for 4-8 weeks. Loss of internal capacity up to 8 weeks. 	<ul style="list-style-type: none"> Serious loss of operational capacity for over 8 weeks and major disruptions to service levels of internal capacity. Loss of internal capacity greater than 8 weeks.
Financial	<ul style="list-style-type: none"> No impact on financial targets. 	<ul style="list-style-type: none"> Up to 2% impact on financial targets. 	<ul style="list-style-type: none"> 2-7% impact on financial targets. 	<ul style="list-style-type: none"> Greater than 7% impact on financial targets.

Uncertainty thresholds for significant forecasting assumptions

	Uncertainty description	Description	Likelihood of risk occurring if assumption is incorrect
Assumption	Low uncertainty	Good level of information / confidence in the assumption	Unlikely
	Moderate uncertainty	Moderate level of information / confidence in the assumption	Possible
	High uncertainty	Poor level of information / confidence in the assumption	Likely