



Significant Forecasting Assumptions 2018/2028

January 2018

Significant Forecasting Assumptions

Forecasting Assumption	Risk	Level of Uncertainty	Reasons and Financial Effect of Uncertainty
Population and Demographic Assumptions			
<p>Population Growth: Kaipara District Council uses the subnational population projections provided by Statistics New Zealand (SNZ) as an indication of future growth trends.</p> <p>With past growth (2006-2016) exceeding projections, the assumption is that population growth will be in line with SNZ 2013 (Census) based high series projections updated at 22 February 2017 which will see district population increases of:</p> <ul style="list-style-type: none"> 2,900 (12.5%) from 23,100 to 26,000 between 2018 and 2028; and 2,000 (7.7%) from 26,000 to 28,000 between 2028 and 2038. <p>Slower growth in the second decade is in line with SNZ projections that population growth will slow across all of New Zealand, between 2028 and 2038 because:</p> <ul style="list-style-type: none"> all areas will be home to more people aged 65 years and over in 2038; and Deaths will increase relative to births in almost all areas as the population ages. The assumption is that between 2018 and 2028 most population growth will continue to occur in the southern part of the district, with rural Rehia-Oneriri Census Area Unit (CAU) growing by 900 people and Mangawhai growing by 1,160 people, to reach a population close to 5,000 by 2028. In combination, these areas will take 71% of district growth. 	<p>Population growth in some areas exceeds the relatively modest levels anticipated in the projections.</p> <p>Population decline in some centres results in too smaller rating bases to pay for upkeep of public assets.</p>	Low/Medium	<p>Population growth is calculated based on the relative rates of births and deaths in the district (natural increase) coupled with the net movement of people in and out of the district (net migration).</p> <p>Of these, net migration is particularly difficult to predict. It is typically influenced by economic conditions and social trends. For example, better economic conditions may lead to more local jobs allowing more people to be employed in the district. On the other hand, the continuing trend towards centralisation results in more industry and related jobs moving to the larger centres, with an associated migration of workers and their families. Conversely, social trends towards lifestyle blocks and retiring in the country may result in population growth in some areas. Any change in economic or social trends is therefore likely to impact on the population of the district.</p> <p>Any significant increase in population growth above projections will place greater demands on some Council services and facilities (such as libraries, solid waste and water supply services) and hence raise operating costs.</p> <p>This is anticipated to have its greatest effect in Mangawhai, Kaiwaka and other eastern areas.</p>

Forecasting Assumption	Risk	Level of Uncertainty	Reasons and Financial Effect of Uncertainty
<p>The smaller urban CAU's in the south - Ruawai, Kaiwaka and Maungaturoto will grow by a combined 150 persons (5% of district growth) although there will be considerable growth in the rural areas around them. Dargaville is expected to grow quite strongly by 310 people (over 10% of district growth) to reach a population of 5,330 by 2028.</p> <p>There will be a continued low share of district growth (just 14%) in the north and north-west, totalling 420 persons.</p>			<p>By contrast, if populations decline in northern and western areas, this may result in some communities becoming unsustainable in terms of their ability to support public infrastructure and services.</p>
<p>Population Fluctuations: The resident population in some parts of the district fluctuates during the year with a significant increase over the summer and other holiday periods.</p> <p>Assumptions are that:</p> <ul style="list-style-type: none"> • The resident district population of 23,100 persons in 2018 could increase during peak holiday periods to over 31,000; • The resident district population of 26,000 persons in 2028 could increase during peak holiday periods to over 35,000; • The resident Mangawhai population of around 3,700 in 2018 could grow to 7,700 (an increase of around 4,000 people) during peak holiday periods; and • The resident Mangawhai population of 4,890 in 2028 could grow to over 10,000 (an increase of over 5,000 people) at peak times. <p>Many visitors are in residence during the summer period and bring with them increased demands on infrastructure and services, for example roads, water supply, wastewater and solid waste disposal. They may also have higher service level expectations than the usually resident population.</p>	<p>Seasonal population fluctuations become more severe over time or the period of peak population lengthens.</p>	<p>Medium</p>	<p>Population peaks during holiday periods demand particular infrastructure and services which are largely unused for much of the year. This can place pressure on capital and operating budgets.</p> <p>It is expected that peak demands can be managed and funded for the foreseeable future.</p>

Forecasting Assumption	Risk	Level of Uncertainty	Reasons and Financial Effect of Uncertainty
<p>It is expected that population fluctuations will continue into the future.</p> <p>The population assumptions for Mangawhai, and all population forecasts are taken from best possible information, and are subject to normal forecast risks.</p> <p>Sources: SNZ – 2013 Census and Mangawhai Wastewater Treatment Plant wastewater flow data 2016/2017.</p>			
<p>Dwelling Growth: Council's capital works programme reflects the amount of growth in the district. The district's rating base also increases in response to dwelling growth. Therefore the amount of growth and the timing of growth are important assumptions for Council.</p> <p>The assumption is for steady to strong dwelling growth in Long Term Plan (LTP) decade 2018/2028 moderating in the 2028/2038 decade as population growth rates begin to slow with an aging population, with projections indicating:</p> <ul style="list-style-type: none"> district dwelling units increasing by nearly 2,000 (1,912) from just under 12,500 to 13,500, and another 1,400 dwellings built between 2028 and 2038; the largest amounts of dwelling growth in the Mangawhai CAUs with over 1,000 dwellings delivered in the LTP 2018/2028 period and another 900 dwellings by 2028; Rehia-Oneriri CAU, covering much of the southern part of the district experiencing ongoing strong growth (450 dwellings in LTP decade 2018/2028 and over 300 more dwellings out to 2028). 	<p>Dwelling growth across the district or individual communities occurs at higher or lower rates than assumed.</p>	<p>Low/medium</p>	<p>Economic conditions and the discretionary nature of the housing market can cause variations in dwelling growth away from that projected.</p> <p>Increases in dwellings may not mimic permanent population trends as most of the growth in the district is likely to be around Mangawhai and other holiday locations where many dwellings will be built for non-permanent residents.</p> <p>Unforeseen fluctuations in economic conditions which affect the ability of people to invest in a second home/holiday home or their ability to retire to the country/seaside are therefore the main drivers of uncertainty in this area.</p> <p>The main financial effect, of growth being different than projected, can be a difference in Development Contributions from what was anticipated. Hence Council should be cautious that growth rates may fail to meet these projections.</p> <p>Council may be able to manage the impacts of such a variation by changing the proposed timing of capital works projects which are required to support growth. Where the capital works projects have already been completed there will be increased finance costs as Council would have to fund</p>

Forecasting Assumption	Risk	Level of Uncertainty	Reasons and Financial Effect of Uncertainty
<ul style="list-style-type: none"> Dargaville gaining 130 dwellings over the LTP period and 70 more homes built in the following decade to meet a modest growth in population. <p>Council's broad assumption is that dwelling growth rate will be more or less consistent with its rating unit growth projections.</p> <p>Council is kept constantly aware of new housing developments through building and resource consents. This allows Council to be kept informed of any deviation from these projections.</p>			these works without the Development Contributions it anticipated.
<p>Age Demographics: The usual resident population in the district is anticipated to continue ageing with:</p> <ul style="list-style-type: none"> 7,600 people in the district (over 29% of the population) aged 65 years and over by 2028, up from just 5,100 (22% of the population) in 2018. 1,790 people in Mangawhai (almost 37% of the population) aged 65 years and over by 2028, up from just 1,110 (28.5% of the population) in 2018. <p>By comparison the number of working age residents (aged 15-64) is expected to remain almost constant at 13,600, 59% of the district population in 2018 but only 52% of the population in 2028.</p> <p>Despite a general ageing of population, the number of children in the district is expected to increase by around 300, from 4,500 in 2018 to 4,900 in 2028.</p> <p>Source: SNZ's 2013 base high series projections.</p>	Ageing of the population is more extreme than predicted.	Low	<p>Increasing the proportion of people aged over 65 relative to the proportion of the population that is working age will increase the dependency ratio of the district. The dependency ratio is the ratio of children and retired people (dependents) relative to the working age population. As the dependency ratio increases, the burden on the working population increases.</p> <p>Any significant variation to the assumed aging population profile may result in certain sectors of the community experiencing lower than expected levels of service. Council may have to redirect funding to particular activities to target the wants and needs of an older population. This may include increasing library services and developing more passive recreation areas. An ageing population may affect the affordability of rates.</p>

Forecasting Assumption	Risk	Level of Uncertainty	Reasons and Financial Effect of Uncertainty																											
<p>Rating Unit Growth: The assumption is that:</p> <ul style="list-style-type: none">district rating units will increase by nearly 2,000 between 2018 and 2028 from just over 14,600 to 16,200 units, increasing by another 1,700 units to reach almost 18,000 rating units by 2038:strongest growth will be in the southern parts of the district with Mangawhai, Rehia-Oneriri, Kaiwaka and Maungaturoto accounting for nearly 1,700 of the 2,000 district rating unit increase between 2018 and 2028.rating unit growth in all other parts of the district will be small and in some cases my decline slightly in the LTP 2018/2028 period. <p>Rating units are expected to increase by the following amounts over the LTP 2018/2028 period with annual percentage changes shown:</p> <table><tr><th>Area</th><th>2018</th><th>2028</th></tr><tr><td>Dargaville</td><td>2,242</td><td>2,289</td></tr><tr><td>Kaipara North</td><td>829</td><td>864</td></tr><tr><td>West Coast</td><td>2,041</td><td>2,149</td></tr><tr><td>Central</td><td>1,942</td><td>2,022</td></tr><tr><td>Maungaturoto</td><td>2,048</td><td>2,221</td></tr><tr><td>Kaiwaka</td><td>1,100</td><td>1,338</td></tr><tr><td>Mangawhai</td><td>4,461</td><td>5,681</td></tr><tr><td>Totals</td><td>14,663</td><td>16,564</td></tr></table>	Area	2018	2028	Dargaville	2,242	2,289	Kaipara North	829	864	West Coast	2,041	2,149	Central	1,942	2,022	Maungaturoto	2,048	2,221	Kaiwaka	1,100	1,338	Mangawhai	4,461	5,681	Totals	14,663	16,564	<p>Rating Unit growth occurs at higher or lower rates than assumed.</p>	<p>Low</p>	<p>Economic conditions and the discretionary nature of the housing market can cause variations in Rating Unit growth from that assumed. Lower Rating Unit growth than anticipated would have a minimal impact on existing ratepayers.</p> <p>Unforeseen fluctuations in economic conditions can affect the ability of people to invest in both business and residential development activity.</p> <p>Any significant deviation from rating unit projections will affect both rates revenue and development contribution revenue. Council should be cautious by monitoring rating unit growth and ensuring it remains close to or meets these projections.</p> <p>Council may be able to manage the impacts of any downward variation by changing the proposed timing of capital works projects which are required to support growth. Where the capital works projects have already been completed there will be increased finance costs as Council would have to fund these works without the rating revenue or development contributions revenue it anticipated.</p>
Area	2018	2028																												
Dargaville	2,242	2,289																												
Kaipara North	829	864																												
West Coast	2,041	2,149																												
Central	1,942	2,022																												
Maungaturoto	2,048	2,221																												
Kaiwaka	1,100	1,338																												
Mangawhai	4,461	5,681																												
Totals	14,663	16,564																												

Forecasting Assumption	Risk	Level of Uncertainty	Reasons and Financial Effect of Uncertainty																				
<p>Development Contribution Growth - Connections to Mangawhai Wastewater Scheme:</p> <p>The assumptions that Council has made in relation to annual connections to Mangawhai Wastewater Scheme are detailed in the table below.</p> <table border="1"> <thead> <tr> <th>Year</th><th>Number of Properties</th><th>Year</th><th>Number of Properties</th></tr> </thead> <tbody> <tr> <td>2018/2019</td><td>84</td><td>2023/2024</td><td>108</td></tr> <tr> <td>2019/2020</td><td>86</td><td>2024/2025</td><td>108</td></tr> <tr> <td>2020/2021</td><td>109</td><td>2025/2026</td><td>108</td></tr> <tr> <td>2021/2022</td><td>108</td><td>2026/2027</td><td>108</td></tr> </tbody> </table> <p>These projections reflect that not all growth in the Mangawhai Wastewater Scheme area will attract a development contribution in the early years as they may have already paid a development contribution or have paid or are paying a capital contribution through their rates. For this reason and because the areas are quite different, these projections do not reflect the forecast growth projections for Mangawhai as a whole.</p>	Year	Number of Properties	Year	Number of Properties	2018/2019	84	2023/2024	108	2019/2020	86	2024/2025	108	2020/2021	109	2025/2026	108	2021/2022	108	2026/2027	108	<p>Rating Unit growth occurs at higher or lower rates than assumed in Mangawhai</p>	<p>Medium/High</p>	<p>Income from Development Contributions assumes these levels of growth. There will be a financial impact if significant variations occur.</p> <p>For Mangawhai, a 10% variation in the annual growth rate will result in a plus/minus variation in the level of wastewater Development Contributions collected of around \$230,000 per annum.</p> <p>Council may be able to manage the impacts of such a variation by changing the proposed timing of capital works projects going forward, particularly those which are required to support growth. Where the capital expenditure has already been incurred there will be increased finance costs which Council would expect to recover through future Development Contributions.</p>
Year	Number of Properties	Year	Number of Properties																				
2018/2019	84	2023/2024	108																				
2019/2020	86	2024/2025	108																				
2020/2021	109	2025/2026	108																				
2021/2022	108	2026/2027	108																				
<p>Absentee to Resident Ratepayers: The percentage of absentee ratepayers is anticipated to decrease slightly over the next ten years, in accordance with recent trends.</p> <p>Based on postal addresses, approximately 74% (72% 06 November 2014) of ratepayers in the Kaipara district (excluding Mangawhai) reside within the district and 26% (28% 06 November</p>	<p>The proportion of absentee ratepayers increases beyond expectations.</p>	<p>Low</p>	<p>The ability of Auckland's working age population to afford a second home will probably be the greatest driver of uncertainty around this assumption.</p> <p>A high percentage of absentee residents has implications for Council services which must be able to deal with seasonal use. Flexibility can be built into contracts to allow higher or</p>																				

Forecasting Assumption	Risk	Level of Uncertainty	Reasons and Financial Effect of Uncertainty
<p>2014) outside the district. For Mangawhai, 47% (37% 06 November 2014) reside within the district and 48% (56% 06 November 2014) in Auckland and 5% (6% 06 November 2014) elsewhere.</p> <p>The percentage of unoccupied dwellings across the district (excluding Mangawhai) has been increasing by around 0.4% per year from 15.3% in 2006 to 17.9% in 2013. By comparison, the percentage of unoccupied dwellings in Mangawhai has been decreasing by 0.3% per year since 2006 from 55.0% in 2006 to 52.7% in 2013.</p> <p>Source: SNZ. This is consistent with the resident ratepayer data which indicates that more people are moving permanently to the Mangawhai area.</p> <p>It is anticipated this trend will continue and intensify as the nation's ageing population results in more holiday home owners retiring permanently to their holiday houses in areas such as Mangawhai.</p>			<p>more frequent services to be delivered during the holiday periods.</p> <p>It is expected that the differing demands of resident and absentee communities can be managed and funded for the foreseeable future.</p>
<p>Affordability: Affordability refers to the ability of the community to pay for Council services.</p> <p>Currently, Council's rates are comparable to those of other local authorities and it is intended that future rate increases will not greatly exceed the Local Government cost Index (a measure of inflation applicable to the Local government sector).</p>	<p>Affordability issues affect the ability of the community to pay rates.</p>	<p>Low</p>	<p>A rise in unemployment or a major downturn in the district's economy may result in greater financial hardships for Kaipara's communities. This coupled with a change in the Government's rates rebate scheme could affect the ability of some ratepayers to pay their rates. Neither of these things is expected to occur in the near future. If Council is not able to levy rates on its community, it will have to respond by reducing levels of service.</p>

Forecasting Assumption	Risk	Level of Uncertainty	Reasons and Financial Effect of Uncertainty
<p>Affordability remains a concern with some sections of the community earning less than others. However, the Government has in place a rates rebate scheme available to low income earners. Given this, Council is of the view that it is reasonable to assume that the community can afford to meet the levels of rating and that there will not be a significant increase in unpaid rates.</p> <p>The following table is based on BERL's estimates of the median incomes of all households (i.e. both usually resident and non-resident households) in the various Kaipara communities, and of the average rates paid by all usually resident and non-resident households in the same communities before the application of any rebate. It shows that Kaipara rates are typically 3.4% of household income.</p>			

CAU	Median household income of all ratepayers (2014)	Average annual rates for all ratepayers (2014/2015)	% of median household income spent on rates
Te Kopuru	\$41,616	\$1,345	3.2%
Kaipara Coastal	\$55,681	\$1,186	2.1%
Maungaru	\$58,659	\$929	1.6%
Dargaville	\$43,143	\$1,976	4.6%
Maungaturoto	\$53,834	\$1,650	3.1%
Ruawai	\$49,094	\$1,096	2.2%
Kaiwaka	\$56,397	\$1,503	2.7%
Rehia-Oneriri	\$56,328	\$1,083	1.9%
Mangawhai	\$65,024	\$2,639	4.1%
Mangawhai Heads	\$63,771	\$2,639	4.1%
Kaipara District	\$56,473	\$1,944	3.4%

Source: BERL, Kaipara District Council, Statistics NZ

Forecasting Assumption	Risk	Level of Uncertainty	Reasons and Financial Effect of Uncertainty
Staffing Assumptions			
Staff Recruitment and Retention: Adequate staffing levels are expected to be maintained and there are not expected to be any recruitment issues when replacing staff.	Kaipara District Council unable to recruit staff with appropriate skills and experience.	Medium	<p>This may result in delays to project deadlines and impact on the level and quality of service.</p> <p>This risk can be mitigated by various initiatives but these bring operating cost implications.</p>
Asset Management Assumptions			
Contracts: It is expected that there will be no changes in the availability of tenderers for Council contracts when they are tendered.	Contractors become very scarce and difficult to secure, limiting the range for selection and driving costs upward.	Medium	Planned expenditure to meet growth and renewals cannot be carried out.
Capital Works Cost: On average, costs of major capital works will not vary significantly from costs estimated at the concept stage.	Costs rise steeply above estimates.	Medium	<p>Council has a higher level of confidence regarding capital project costs in the short term but less certainty in the longer term due to fluctuations in the economy and district growth trends.</p> <p>Council is proposing a conservative capital works programme over the next ten years. This reduces the level of risk that it faces in this area.</p> <p>A 5% variation in a \$500,000 project would add \$25,000 to the project cost. Given the long useful life associated with many of Council's capital works projects such a variation would not have a significant rating impact.</p>

Forecasting Assumption	Risk	Level of Uncertainty	Reasons and Financial Effect of Uncertainty
			If Council was concerned about the increase in cost then it could look for alternative ways of completing the works and/or change the scope of the works to be completed. Should the cost be lower than estimated there would be a favourable impact on Council's budgets.
<p>Property Designations/Resource Consents: Any new property designations or Resource Consents required for water, stormwater and wastewater systems, or for the significant upgrading of existing systems, will be able to be obtained, subject to conditions acceptable to Council. Any necessary land purchased, prior to the time that has been scheduled for the actual construction works.</p> <p>Council has assumed that there will be no significant changes to existing resource or discharge consent conditions that create significant additional costs.</p>	The necessary designations or consents cannot be obtained, or the necessary land purchased, before the scheduled time of construction, resulting in works being delayed.	Medium	The risk can be minimised if Council always has a clear and detailed future forward work programme to which it is committed, for at least the next three years, enabling timely consent applications or timely land purchases. This will be achieved through Council's 30 year Infrastructure Strategy.
	Resource Consent standards lead to higher treatment standards which lead to higher cost.	Medium	Higher treatment standards will lead to higher capital and operating costs. While Council can anticipate some of these changes and ensure that they are reflected in budgets the final impact will not be known until the Resource Consent is granted.
	Conditions attached to existing Resource Consents change, or Council is unable to renew these when they expire.	Low	A significant change could increase compliance costs which would need to be funded from increasing user charges or rates.

Forecasting Assumption	Risk	Level of Uncertainty	Reasons and Financial Effect of Uncertainty
Drinking Water Standards Council has assumed that there will be no significant changes to the New Zealand Drinking Water Standards that create significant additional costs.	New Drinking Water Standards lead to higher treatment standards which lead to higher cost.	Medium	Higher treatment standards will lead to higher capital and operating costs. Any impacts will not be known until revised Drinking Water Standards are published.
Significant Land Use Changes: There will not be any major changes to land uses in the district that have consequential impacts on Council infrastructure needs.	Unforeseen land use, of a type that has potential significant effects, occurs.	Low	Council will need to assess the situation but this matter is not entirely within Council's hands. A third party may lodge an application for a plan change or non-complying consent at any time. This can lead to higher unforeseen costs in certain areas.
Building Control: Council will continue to meet the requirements of being accredited by International Accreditation New Zealand in order to maintain its registration with the Department of Building and Housing as a Building Consent Authority. That Council will be faced with a significant leaky building claim is unlikely. Reference: Ministry of Business Innovation and Employment.	Loss of accreditation so Council could no longer grant Building Consents. A significant leaky building claim has the potential to affect the General Rates.	Low	Council has a continuous improvement programme to focus on ensuring standards are met. There has been investment in additional management resource to support this process as well. Council has always achieved compliance to date. Council has in the past had very limited exposure to leaky building claims, and the improvements to processes arising from accreditation make it even less likely for a substantial claim to arise in future.
District Leadership: The Local Government Act 2002 provisions relating to decision-making and the expectations which the community has on Council is assumed to remain unchanged.	Council is unable to meet community expectations. Changes to key legislation may require reviews on local governance.	Low	There may be increased costs associated with quality assurance for decision-making processes. There is also a loss of confidence from the community which will need to be repaired.

Forecasting Assumption	Risk	Level of Uncertainty	Reasons and Financial Effect of Uncertainty
Local Government structure for Northland and Auckland remains the same and no significant shared service or amalgamated service structures are put in place.	Amalgamation as a result of legislation or otherwise is introduced.	Low	Restructure costs and the effects of uncertainty and change of delivery
<p>Emergency Management: It is assumed that there will be no natural disasters requiring emergency management work that cannot be funded out of the budgetary provisions.</p> <p>No significant legislative changes are anticipated that result in policy and procedural reviews.</p>	<p>A major natural disaster occurs.</p> <p>Legislative changes result in general and specific costs for particular items such as tsunami warning systems.</p> <p>Costs of policy and procedure reviews rise well above budget provisions.</p>	<p>Low/Medium</p> <p>Low/Medium</p> <p>Low/Medium</p>	<p>Significant additional “one-off” repair costs and rating impacts may be incurred as a result of emergency events.</p> <p>It could be expected that higher operating costs will be incurred because of public demands or legislative requirements for higher levels of readiness.</p>
Roading: There is sufficient provision in the LTP to cope with the effects of likely storm events.	Storms greater than average sized events will require a reprioritisation of expenditure in the LTP to accommodate the costs to repair the district's roads.	Medium	Not all costs may be able to be covered by existing budget constraints.

Forecasting Assumption	Risk	Level of Uncertainty	Reasons and Financial Effect of Uncertainty
Flood Protection: Weather patterns and rain intensity are expected to increase steadily as are tidal sea levels in the future.	Predictions are under or over estimated.	Low	Significant additional “one-off” repair costs and rating impacts may be incurred as a result of storm events. It could be expected that higher operating costs will be incurred because of public demands for higher levels of readiness.
Libraries: Changes in the district’s population demographics resulting in greater numbers of retirees and Maori youth, is expected to increase demand for library services. It is anticipated there will be ongoing demands for change in the range and types of services that the district’s libraries are expected to provide. Demand for electronic resources in particular is expected to increase.	Demand for services rise steeply or change in type and nature of services.	Low/Medium	The technology associated with reading and the role of libraries is changing. There will be additional costs associated with the new technology and services.
Parks and Reserves: It is assumed that expectations of reserve maintenance, the range and standard of facilities provided, safety and accessibility and compatibility will not change significantly.	Cost of operations and maintenance rise above expectations and start to undermine maintenance standards and community expectations.	Medium	If the increased expectation is to be met, it will increase costs.
Solid Waste: It is assumed that all rubbish will continue to be disposed of outside the district and that the closed landfills will continue to meet Resource Consent conditions.	Landfills outside the district can no longer be used. The district’s closed landfills no longer meet Resource Consent standards.	Low	If Council needed to re-commission one or more closed landfills there would be significant extra cost and contingent liability for their operation.

Forecasting Assumption	Risk	Level of Uncertainty	Reasons and Financial Effect of Uncertainty
Stormwater: Demand for new stormwater systems or significant upgrades to stormwater systems are not expected to significantly impact on either asset requirements or operating costs.	That development demand exceeds forecasts and/or slows down significantly. That a severe weather event or more frequent events affects the integrity of a system.	Medium	If development increases significantly from forecasts, this may require increased expenditure to increase capacity to meet the demand. Storm damage or response to increased expectations for treatment and/or disposal of stormwater could increase rates within the affected catchment area.
Wastewater Demand: Demand increases will not exceed existing projections and projects in excess of those planned.	That development demand exceeds forecasts or slows down significantly.	Medium	The activity is confined to identified catchment areas, so financial impacts will be within the specific area.
Wastewater Treatment Plants: Resource Consents for major capital works are expected to be obtained without undue delays and consent compliance will therefore be achievable.	Resource Consents are appealed to the Environment Court resulting in significant delays.	Medium	There can be additional costs associated with complying with consent conditions as standards continue to increase. These additional costs will be borne by the catchment area serviced.
Water Supply Demand: Increase in demand over that forecasted for treated water is not expected to significantly impact on either asset requirements or operating costs. Severe drought, resulting in water shortages, will not occur to the extent that water supply for human consumption and sanitation is compromised.	Development demand exceeds forecasts. Water shortages may result in emergency aid being required and losses in economic opportunities.	Low Low	Water is charged on a volumetric basis and a change to volume used will be reflected in revenue. Northland may become dryer if climate change predictions hold true. Dargaville has historically experienced water shortages during droughts. Steps can be taken, however, to reduce demand and manage water resources more effectively (Drought Management Plans have been developed).

Forecasting Assumption	Risk	Level of Uncertainty	Reasons and Financial Effect of Uncertainty
Water Conservation: Water conservation measures are expected to be sufficient to counter the effects on demand arising from adverse drought conditions and high peak season water demand.	Conservation methods are not sufficient to counter the effects of a drought.	Medium	While demand can be managed by regulation, a reduced water supply would mean reduced income from those supply areas which pay by metered usage.
Asset Management Plan Information: Council has developed Asset Management Plans for a number of its activities. Council continues to improve its asset planning information - particularly in regards to asset condition and performance. Asset condition information is accurate	Asset conditions differ from the current information	Medium	Any need to increase maintenance budgets and/or renewals expenditure above planned levels would lead to increased costs (and therefore rating requirement) for Council. The extent of this risk cannot be quantified
Financial Assumptions			
Useful Lives Of Significant Assets: It is assumed that no significant assets will fail before the end of their useful lives as determined in accordance with the depreciation rates set out in the accounting policies of Council.	Some assets may wear out and fail sooner or later than calculated.	Medium	There is no certainty that asset components will last exactly their design or assessed lives. However, replacement is budgeted at the expected end of useful life and earlier replacement will result in a loss on disposal of any residual value. Earlier replacement may result in the deferral of other discretionary capital projects in order to remain within self-imposed debt limits as set out. Some assets are likely to last longer than their design lives which would help to balance the effects of any early replacement of assets.
Revaluation of Non-Current Assets: Revaluations are planned to be undertaken every three years. It is assumed that these will be completed on a rotational basis i.e. not all revaluations will occur in one particular year. For the purposes of this LTP, the values of non-current assets have been increased annually using the applicable BERL inflation factor for each class of infrastructure asset.	The actual inflation rate may vary from the BERL inflation factors,	Medium	There is no certainty as to what the actual inflation rates will be over the next ten years. External influences beyond Council control can affect these rates. If the asset class is depreciable the depreciation will differ from that in the forecast.

Forecasting Assumption	Risk	Level of Uncertainty	Reasons and Financial Effect of Uncertainty
<p>Depreciation Rates on Planned Asset Acquisitions: Depreciation expenses on new assets acquired within the term of this Plan have been determined at the applicable rate defined within the accounting policies.</p>	That the depreciation rate applied to acquire assets is inaccurate.	Low	The depreciation expense and funding would differ from that forecast.
<p>Price Level Changes: Costs of providing local government services will increase at a higher rate than inflation. Overall the Local Government Cost Index (LGCI) has risen faster than the Consumer Price Index since 1999 at an annual rate of 3.6% and 2.7% respectively. Cost structures faced by local government will continue to differ significantly from the Consumer Price Index “basket”.</p> <p>The principal assumption made for the ten year period between 2018 and 2028 is that annual inflation will occur at rates broadly in line with the average of the cost indexing estimates collected for local government use by the Society of Local Government Managers (see table below).</p> <p>Cost factors will mirror the inflation indices referred to in the above assumption.</p> <p>In general, adjustors for construction-related activities (i.e. pipelines, earthmoving, roads and water) show the greatest cumulative change over the forecast horizon (2018/2028). Much of this occurs over the early-to-middle years of this period.</p> <p>The overall the LGCI is anticipated to increase a total of 28.2% from June 2018 to 2028. This corresponds to an average increase of 2.78 % per annum.</p>	The price level changes will vary from those used.	High	<p>Provided the Reserve Bank of New Zealand is required to keep general inflation under 4% per annum, the projected changes in price levels will vary only slightly. The effect of any variation up, or down, will result in either higher or lower rate requirements. Based on a projected annual operating expenditure of \$45 million, a plus/ (minus) 1% movement in the forecast inflation rate would result in an approximate movement in operating costs of plus/ (minus) \$450,000. Similarly, with an annual capital works programme of \$15 million a plus/ (minus) 1% movement in the forecast inflation rate would result in an approximate movement in capital costs of plus/ (minus) \$150,000.</p> <p>If the impact of inflation on Council's budgets turns out to be higher than forecast and Council did not wish to generate additional revenue by increasing rates, then either additional operational efficiencies or reduction in service levels or planned capital expenditure would need to be considered.</p> <p>Should the impact of inflation turn out to be lower than forecast then there would be a favourable impact on Council's operating and capital expenditure budgets.</p>

Forecasting Assumption	Risk	Level of Uncertainty	Reasons and Financial Effect of Uncertainty
------------------------	------	----------------------	---

Adjustors: % Per annum change

(The white area represents figures based on actual data while the remainder are projections)

Label Year ending	Adjustors				
	Planning and regulation	Roading	Transport	Community activities	Water and Environmental
	<i>PR</i>	<i>RD</i>	<i>TR</i>	<i>CA</i>	<i>WE</i>
	% change (on year earlier)				
Jun 15	1.5	2.3	1.6	1.8	3.2
Jun 16	0.8	1.4	1.1	1.6	2.1
Jun 17	1.4	1.6	1.6	1.8	1.2
Jun 18	1.8	1.9	1.9	1.7	1.8
Jun 19	2.0	2.0	2.0	1.7	2.3
Jun 20	2.1	2.2	2.0	2.0	2.5
Jun 21	2.1	2.2	2.1	2.1	2.3
Jun 22	2.1	2.3	2.2	2.1	2.4
Jun 23	2.2	2.4	2.2	2.2	2.4
Jun 24	2.3	2.4	2.3	2.3	2.5
Jun 25	2.3	2.5	2.4	2.3	2.6
Jun 26	2.4	2.6	2.5	2.4	2.6
Jun 27	2.4	2.7	2.5	2.4	2.7
Jun 28	2.5	2.8	2.7	2.6	2.8

BERL

Forecasting Assumption	Risk	Level of Uncertainty	Reasons and Financial Effect of Uncertainty																		
NZ Transport Agency Subsidy Rate: The NZTA's financial assistance rate (FAR) for Kaipara District Council has been set at 61%. It is assumed that this FAR will remain for the life of the plan. It is also assumed that the level of subsidy will increase in proportion to increased costs.	There is a risk that subsidy rates will reduce within the 10 year period.	Medium	Roading activities dominate Council's expenditure. Any change in the subsidy rate has a direct impact on Council's budget, level of rating or level of service.																		
Interest Rates on Borrowing: The forecast interest rates are the actuals for existing loans and swaps. The interest cost of the new debt or refinanced debt is assumed to be at an average of 4.39%, which is a conservative estimate, using the long term average forecasts and a margin of 0.75% - 1.0% assuming that we continue to borrow from the Local Government Funding Agency (LGFA). The combined all up of cost is assumed to be 5.27%.	Interest rates will increase beyond those budgeted for in the 10 year LTP period.	Medium	<p>Interest costs on borrowing.</p> <p>A 1% variation in interest rates would give the following increases in interest costs at the following levels of debt:</p> <table><tr><td>Total Debt</td><td></td><td>\$60 million</td><td>\$55 million</td><td>\$50 million</td><td>\$40 million</td></tr><tr><td>Interest \$</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Variance with Movement of:</td><td>1%</td><td>\$600,000</td><td>\$550,000</td><td>\$500,000</td><td>\$400,000</td></tr></table> <p>A \$500,000 increase in interest costs equates to approximately a 1.5% increase in rates for 2018/2019.</p>	Total Debt		\$60 million	\$55 million	\$50 million	\$40 million	Interest \$						Variance with Movement of:	1%	\$600,000	\$550,000	\$500,000	\$400,000
Total Debt		\$60 million	\$55 million	\$50 million	\$40 million																
Interest \$																					
Variance with Movement of:	1%	\$600,000	\$550,000	\$500,000	\$400,000																
Refinancing Term Loans/External Funding: Currently loans are directly attributable to particular costs. Internally, loan repayments are made over five years for IT and similar short life expenditure, 10 years for the District Plan and 20 years for infrastructural assets except for the Mangawhai Wastewater Scheme which is over 30 to 40 years depending on the debt tranche. External loans are managed on a portfolio basis and refinanced in accordance with the parameters of the LTP, the liability management policy and on the advice of Council's Treasury Advisors. Refinancing of external loans is assumed to be readily achieved. Council expects to maintain a significant lead-in time within which it can seek to lock in funding at acceptable margins.	Refinancing of external loans is difficult.	Low	The refinancing of Term Loans/External Funding may prove difficult to secure due to conditions within financial markets. This could lead to increased borrowing costs. Council will look to manage this risk by maintaining significant lead-in time before debt is needed.																		

Forecasting Assumption	Risk	Level of Uncertainty	Reasons and Financial Effect of Uncertainty
Internal Borrowing: Operational reserves (such as the Land Subdivision Reserve) and other reserves are utilised in the first instance to minimise external debt funding. These reserves are effectively on call.	That the reserves are required in short timeframes and Council's liquidity facilities are insufficient.	Low	Expenditure is planned through the Annual and LTPs. Council operates within the parameters of its Treasury Policy which incorporates the liquidity and liability management policies.
Lump Sum Payments: That a proportion of property owners connected to the Mangawhai Wastewater Scheme paying the Capital Contribution A – F targeted rate will pay for their share of the capital costs of building the Scheme via a lump sum rather than over the 30 year term as a targeted rate. Council has assumed that take up of the offer is assumed to be minimal at this stage.	That the number of property owners taking up the lump sum option will be higher or lower than forecast.	Low	Any lump sums collected will be used to reduce debt. Acceptance by 10% of property owners would reduce debt by approximately \$860,000. A property having paid the lump sum will also no longer be liable for paying a capital contribution via a targeted rate. Hence, any variance in the number of properties paying lump sums will not affect the targeted rate for capital costs payable by other properties.
Vested Assets: Council does expect to receive vested assets over the life of this Plan.	The value of vested assets is greater than predicted thereby increasing depreciation expense.	Medium	From time to time developers will seek to vest certain assets in Council in lieu of making payments for financial or Development Contributions.
Sources For Funds For Future Replacement of Significant Assets: It is assumed that funding for the replacement of significant assets will be obtained in accordance with Council's Revenue and Financing Policy.	The main risk is that budgets for some capital replacements may not have been included and sources may not meet requirements.	Low	There is little or no risk that sources of funds for replacement of significant assets will not be achieved. Funding of all asset replacements during the life of the LTP has been disclosed.

Forecasting Assumption	Risk	Level of Uncertainty	Reasons and Financial Effect of Uncertainty
Other Assumptions			
Structure of Local Government: This LTP is prepared on the assumption that the structure of local government in Northland will remain unchanged over the life of the Plan.	There may be substantial changes to the structure of local government in Northland.	Low	The Local Government Commission has confirmed there will be no further amalgamation between the Northland councils but that they will continue to support the development of co-operative practices.
Climate Change: It is assumed that there will be no significant changes in weather patterns that will impact current cost structures, beyond the estimated impacts in flood protection services.	Climate Change may accelerate the frequency of droughts and storm events and associated flooding.	Medium	In the event that climate change causes more frequent extreme weather events, the cost of managing Civil Defence Emergencies will rise. Furthermore the impact of more frequent droughts on the primary sector has the potential to affect the prosperity of the district as a whole.
Emissions Trading Scheme: Council currently holds New Zealand units for pre-1990 forests, but does not plan on surrendering or obtaining any units. With the sale of much of the woodlot these units may be available for sale.	In the event that pre-1990 forests are lost and could not be replanted or regenerated Council would need to surrender or purchase credits.	Low	As Council is not planning on deforesting any of its land, it would have the New Zealand Units available to meet any unforeseen events.
Local Government Funding Agency (LGFA)			
Guarantee Obligations: Council has become a “guaranteeing local authority” in the LGFA when it joined the Agency. This means it will have guarantee obligations. At the year end 2017 Councils exposure was \$903,000.	Council is one of 44 local authorities that guarantee LGFA’s borrowings. These could be called on if LGFA defaulted on repayments of interest or capital.	Low	Council considers the risk to be low.