

01-65-082
RDC-1175468ROTORUA LAKES COUNCIL

Mayor
Chair and Members
STRATEGY, POLICY & FINANCE COMMITTEE

INFRASTRUCTURE ACCELERATION FUND EXPRESSION OF INTEREST – FOR INFORMATION**Report prepared by:** Jacque White, Senior Strategy Advisor**Report reviewed by:** Jean-Paul Gaston, Deputy Chief Executive – District Development**Report approved by:** Geoff Williams, Chief Executive

**1. TE PŪTAKE
PURPOSE**

The purpose of this report is to provide an overview to the committee of our Expression of Interest submission to the Infrastructure Acceleration Fund on the 18th August 2021.

**2. HE TŪTOHUNGA
RECOMMENDATION**

- 1. That the report ‘Infrastructure Acceleration Fund Expression of Interest – For Information’ to be received.**
- 2. That the Committee notes that the Expression of Interest application for the Infrastructure Acceleration Fund has been submitted.**

**3. TE TĀHUHU
BACKGROUND**

In March 2021, Central Government announced the \$3.8 billion Housing Acceleration Fund (HAF) to help increase the supply of houses and improve affordability for home buyers and renters. A key component of the fund is the Infrastructure Acceleration Fund (IAF).

The IAF is a contestable fund for investment in enabling infrastructure to support new housing supply throughout Aotearoa, with at least \$1 billion of grant funding available. The IAF aims to increase the pace and scale of housing delivery by helping to fund critical infrastructure needed for developments.

The IAF opened for Expressions of Interest (EOI) on the 30 June 2021 with submissions due on 18th of August 2021.

Proposals will be assessed on:

- Housing outcomes - number of additional dwellings, proportion of lower-cost houses, access to amenity and opportunity, Māori and manu whenua involvement and environmental outcomes.

- Impact - How critical the funding is to advancing the infrastructure and housing development.
- Co-funding – How cost effective the proposal is and all parties are contributing.
- Capability and readiness – How quickly the project will advance.

Kāinga Ora is responsible for administrating the fund and will evaluate the proposals. Applicants with successful EOIs will receive a Request for Proposal (RFP) seeking more information on their Proposals. We are expecting to receive a Request for Proposal in October.

4. HE MATAPAKI I NGĀ TAKE DISCUSSION

Rotorua Lakes Council submitted three EOI totalling \$113m for enabling stormwater infrastructure across the Central, Western and Eastern areas of the city.

A strategic decision was made to focus on enabling infrastructure to support intensification as we have very few consented greenfield opportunities and the majority of our latent development opportunity is in the form of infill and redevelopment associated with brownfield intensification.

This approach is closely aligned with the purpose of the National Policy Statement – Urban Development (NPS-UD). To achieve the housing outcomes proposed in each application, we also need to complete an Intensification Plan Change which is being actively worked on.

The Western and Eastern proposals look to accelerate projects within the Stormwater Master Plan and 30 year Infrastructure Strategy, whereas the Central Proposal contains projects not identified within the Stormwater Mater Plan and 30 Year Infrastructure strategy as intensification within the central area was not anticipated.

We received letters of support from Te Arawa Lakes Trust, Bay of Plenty Regional Council, Fordland's Community Centre, Bay Trust, Rotorua Trust, Habitat for Humanity and a number of housing developers. If we are successful in getting to the next stage, we will continue to work closely with our partners.

An overview of each application is provided below.

Central Proposal

IAF Funding Sought = \$28,540,000

The proposal is to significantly upgrade the stormwater infrastructure in the central area. This includes redirecting water to towards the east (away from the Uthina Stream) by upgrading Tilsley Street pump station and increasing the stormwater pipe and drain capacity.

Our proposal was based on an estimate of the maximum possible infill/intensification yield of 1,765 additional dwellings. A significant proportion of these will be considered affordable, in line with the fund objectives. Our additional dwellings estimate is based on developments which are actively being considered, although, we do think there is significantly more opportunity for intensification / infill centrally. These funds are critical to enable intensification in the central area. Through funding identified in our Long Term Plan (LTP) and with the support of Waka Kotahi, we are confident we can deliver all other infrastructure requirements needed to enable intensification and we could start feasibility work as soon as funds are received.

Western Proposal

IAF Funding Sought = \$61,550,000

The proposal is to further progress stormwater upgrades and expansion in the western suburbs. This includes construction of four major stormwater detention ponds / basins with wetlands and upgrades to existing pipes and drains.

Our proposal was based on an estimate of 1,320 additional dwellings with the understanding that a significant proportion of these will be affordable, in line with the fund objectives. Our additional dwellings estimate is based on developments which are actively being considered, although, we do think there is significantly more opportunity for intensification / infill in the west. These funds are critical to enable intensification in the western area. Through funding identified in our LTP and with the support of Waka Kotahi, we are confident that we can deliver all other infrastructure required to enable intensification, support the Pukehangi Plan Change and we could start feasibility work as soon as funds are received.

Eastern Proposal

IAF Funding Sought = \$23,760,000

The proposal is to further progress stormwater upgrades for the Wharenui Blocks and expansion within the eastern suburbs. This includes construction of three detention ponds with wetlands, new stormwater drains, realigned existing channels and culvert upgrades.

Our proposal was based on an estimate of 2,151 additional dwellings with the understanding that a significant proportion of these will be affordable, in line with the fund objectives. Our additional dwellings estimate is based on developments which are actively being considered, although, we do think there is significantly more opportunity for intensification / infill in the east. These funds are critical to enable intensification and support new developments within the Eastern area. Through funding identified in our LTP and with the support of Waka Kotahi, we are confident we can deliver all other infrastructure requirements to enable intensification and the development of Wharenui Blocks. Feasibility work could begin work as soon as funds are received.

5. TE TINO AROMATAWAI ASSESSMENT OF SIGNIFICANCE

The information in this report is not considered significant in accordance with Council's Significance Policy.

6. NGĀ KŌRERO O TE HAPORI ME TE WHAKATAIRANGA COMMUNITY INPUT/ENGAGEMENT AND PUBLICITY

At this stage, consultation on this matter is not being undertaken as it is too early in the process. If funds are received from the IAF, community consultation will be required during the consenting phase of the infrastructure project.

Community consultation has been completed in regards to the 30 year infrastructure strategy and 2021 – 2031 Long Term Plan where the Eastern and Western projects were included.

Te Arawa and Bay of Plenty Regional Council will be involved in the feasibility and detailed design project phases.

7. HE WHAIWHAKAARO CONSIDERATIONS

7.1 Mahere Pūtea Financial/budget considerations

There are no costs associated with the EOIs submitted. All other enabling infrastructure costs are included in the 30 year Infrastructure Strategy and / or the 2021-2031 Long Term Plan.

7.2 Kaupapa Here me ngā Hiraunga Whakariterite Policy and planning implications

The decisions in this report align with the Vision 2030 Goals of a Homes that match Needs, Resilient Community, Vibrant City Heart and Enhanced Environment.

The decisions in this report support the strategic outcomes identified in He Papakāinga, He Hāpori Taurikura – A Strategy for Homes and Thriving Communities

7.3 Tūraru Risks

There are no major risks associated with the decisions or recommendations in this report.

7.4 Te Whaimana Authority

The Strategy, Policy and Finance Committee is delegated to report to Council on this matter.

8 NGĀ ĀPITI HANGA ATTACHMENTS

Attachment 1: Application Notes and the Rotorua Context

Attachment 2: Rotorua Urban Stormwater Catchments and Housing Outcomes

Attachment 3: Detail of Stormwater Plan

Attachment 1: Application Notes and the Rotorua Context

Rotorua Lakes Council Infrastructure Acceleration Fund application.

Opening Note

RLC would like to thank the New Zealand Government for the opportunity to submit this Expression of Interest to the Infrastructure Acceleration Fund.

The approach proposed by Rotorua Lakes Council (RLC) in this Expression of Interest response focuses on enabling intensification through significant investment in stormwater infrastructure that is currently considered a significant constraint to housing development within Rotorua.

The focus on intensification is closely aligned with the purpose of the National Policy Statement – Urban Development (NPS-UD) which aims to ensure that New Zealand’s towns and cities have well-functioning urban environments that meet the changing needs of our diverse communities.

Working collaboratively with a variety of stakeholders will also be vital to deliver significant housing outcomes. This includes working alongside mana whenua in developing housing and infrastructure solutions, an approach that reflects the already strong partnership between Te Arawa and RLC. Furthermore it includes continuing to build on our existing partnerships with Kainga Ora (KO) and the Ministry of Housing and Urban Development (MHUD), partnerships that have already proven effective in delivery positive housing outcomes for the Rotorua community.

Application notes

1. We note that the nature of this application form lends itself towards specific known developments that have been fully planned in accordance with the Resource Management Act 1991 (RMA) and where infrastructure costs/barriers are identified as the key constraint to development or limitation on density and hence, where housing outcomes can be directly and precisely linked to enabling infrastructure projects. As articulated in the context that follows, the development landscape in Rotorua is such that we have very few consented greenfield development opportunities (aside from Wharenui and Pukehangi as referenced in this application) and the majority of our latent development opportunity is in the form of infill and redevelopment associated with brownfield intensification.

Therefore, our approach to the IAF applications is not to focus on specific housing development opportunities but rather on high impact core infrastructure projects that will unlock and accelerate development across the entire District. It is anticipated that housing delivery that will be 'reasonably expected to be realised' will be residential development influenced by future plan changes and the associated market responses, making accurate numbers of houses by price point and typology a challenge to accurately estimate at this point in time.

The Council's approach has therefore been to support the development of a pipeline of opportunities and then estimate our future housing outcomes supported by an assessment of infill potential. Throughout the application, we have defined how we have undertaken our analysis to demonstrate how we align to the fund criteria and our best estimates of the anticipated longer-term impact.

2. Due to challenges in relation to obtaining key data and information sets required for modelling housing development, the Housing and Business Development Capacity Assessment (HBA) is not yet complete and hence we do not have a final understanding of infill capacity. Once the HBA is complete in October (2021) we will have the finalised numbers for this which will be available for any further applications, should our expression of interest be accepted to the next stage.
3. Commercial sensitive information has been drawn upon for this Expression of Interest. If the Expression of Interest is to be made public, we request the opportunity to redact commercial sensitive information.

Rotorua context

a. Executive Summary

In March 2020, a Ministry of Housing and Urban Development's (MHUD) 'Place-based Assessment' identified that Rotorua had a housing shortage of approximately 1500 – 1750 homes to meet the needs of the existing community, which was accepted as our shortage baseline. After considering this shortage as a starting point and adding recent Infometrics growth projections it is now projected that 6,000 new homes will be needed by 2030, of which 4,260 will be required by 2026.

This situation has resulted in multiple issues for the District, specifically:

- An increasing need for social housing - In June 2014 there were 40 applicants on the Social Housing Register and by March 2021, this number had risen to 688.
- An increasing level of homelessness - At the start of August 2021 there are 761 households living in government funded emergency and transitional housing (traditional Emergency Housing (EH), MHUD contracted EH, traditional Transitional Housing (TH), Covid (TH) largely utilising motels that are not consented for this purpose.
- Lack of accessibility to suitable housing for the Rotorua community. - Market rents have moved beyond the means of a significant share of renting household incomes. A lower quartile rent would have been affordable for 80% of renting households back in 2013, but is only affordable for 45% of renting households now.

Lack of available housing is discouraging businesses and skilled people from moving to Rotorua, resulting in an opportunity cost to the District. The issues highlighted above have a negative impact on the wellbeing (economic, social, and cultural) of individuals, whanau, and local communities. This situation is the result of key drivers that include: a period of low growth followed by more recently by high and sustained growth; limited opportunities for greenfield development; lack of housing supply and rising demand for smaller housing typologies; a District Plan that does not adequately enable intensification; geotechnical, geothermal and topographical issues that constrain development; and core infrastructure that requires significant further expansion to enable development.

In response to the issues highlighted above Te Arawa and Rotorua Lakes Council (RLC) jointly developed the '*He Papakainga, He Hapori, Taurikura Te Poupu Rautaki – The Homes and Thriving Communities Strategic Framework*' (2020). Through the initial implementation of this strategic framework and the work completed to meet the requirements of the National Policy Statement on Urban Development 2020 (NPS-UD), it is clear that Rotorua should be more focussed on enabling intensification alongside the development of the major greenfield areas (Wharenui, Pukehangi, and new greenfield at Ngongotaha). This also reflects the focus determined in the 2018 Spatial Plan for the district. This focus aligns with Kainga Ora's (KO) emerging development strategy for Rotorua. Typically, intensification results in more affordable housing through the enabling of smaller housing typologies such as duplexes, 'walk-ups', terraced housing and apartments. This type of development will be closer to existing amenities, employment opportunities and transport. This intensification supports communities that are less deprived by providing greater accessibility. This type of development is also more efficient and sustainable as a compact urban form reduces the cost of overall infrastructure provision and can help reduce greenhouse gas emissions by encouraging people to travel less and to use low-emissions models of transport. To enable this type of growth, an intensification plan change has been prioritised and it is envisaged that it will be operative by 2024 (notified in line with NPS-UD requirements).

Development in Rotorua is also constrained by its lack of sufficient enabling infrastructure. In 2021, a 30-year Infrastructure Strategy was adopted through the 2021-2031 Long Term Plan (LTP), which is focussed on enabling growth. To uphold our commitments and partnership with Te Arawa and to significantly improve water quality, our key infrastructure priority is the upgrading of the Rotorua

Waste Water Treatment Plant (WWTP). To manage debt levels appropriately, this restricts other infrastructure capital spend over the short and medium term.

To more widely enable residential intensification across our urban area, our three waters infrastructure will require further upgrades and expansion. The most significant of these is the Rotorua stormwater network. In this regard, we are seeking \$113m through three separate applications to further plan and develop comprehensive stormwater solutions across the Eastern, Western and Central areas respectively (see Figure 1 below for definitions).

This funding would significantly accelerate the planned stormwater upgrades in the Eastern and Western areas, delivering the majority of the 30-year strategy within the first seven years, and deliver new stormwater solutions in the Central area to meet previously unanticipated growth. In terms of co-funding, RLC and Waka Kotahi will deliver the other infrastructure (transport, water supply, wastewater) requirements to meet the housing growth requirements. Without the support of the Infrastructure Acceleration Fund (IAF), housing outcomes from the intensification plan change will be limited, planned developments will not achieve their maximum yield potential and many developments will not progress, resulting in a deepening of the housing crisis in Rotorua.

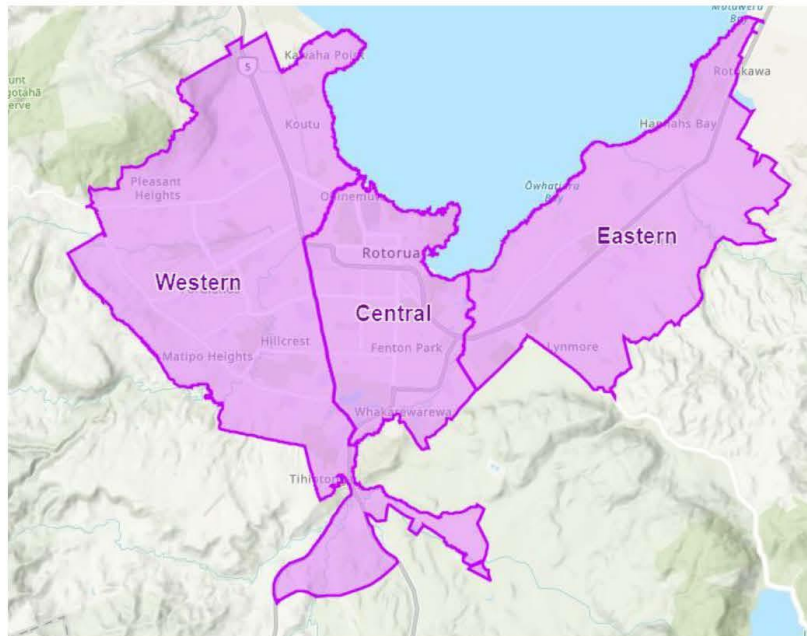


Figure 1 - Definition of areas in relation to stormwater solutions and IAF applications

b. Housing Context

As previously stated it was estimated by MHUD in 2020 that Rotorua currently had a housing shortfall of between 1,500 and 1,750 homes. A long period of low growth prior to 2013 and a rapid increase in household growth since has resulted in growth response challenges for both Council and the market to meet the rising demand, which has in turn resulted in the significant and sustained increase in housing prices and rents.

In 2012, when the current operative district plan was notified, Rotorua’s population was forecast to decline. This outlook provided the context behind how the current District Plan zones and provisions were defined, resulting in a less enabling framework for higher densities and facilitating growth. The nature of this growth and the associated housing issues, as context for the application, is outlined briefly below:

The population of Rotorua has grown by 6,597 to 71,887 between 2013 and 2018 (greater than 10% in 5 years), with the Māori population growing by 4,375 to 28,839 – 18% over the same period. In 2019/2020, household demand increased by 580, however dwelling supply only increased by 210 dwellings.

At July 2021, 8,289 households in Rotorua receive the accommodation supplement, and there are 8,742 MSD main benefit recipients, the rates of benefit dependency are among the highest in the country. Wages are lower compared to the rest of New Zealand and the unemployment rate is 6.9% compared with 4.7% nationally (Infometrics March 2021).

At the end of 2015, the median house price was \$271,750. This increased to \$525,625 by the end of 2020 (an increase of 253,875 or 93% - nearly doubling in 5 years). Average rents increased from \$279/week to \$383/week 2015-2020 (an increase of \$104/week or 37%). Figure 2 below is from recent MHUD analysis and shows the misalignment between the distribution of household incomes (solid blue) and rental prices (solid yellow).

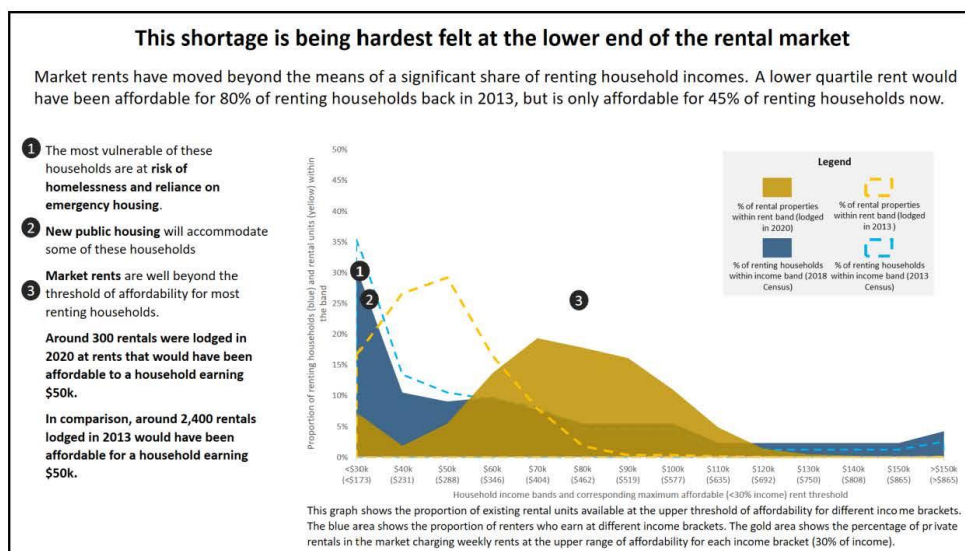


Figure 2 - MHUD analysis on rents and income

Despite the clear need for affordable homes, as at 2020, some 87% of dwellings occupied by resident households were separate houses (primarily 3-4 bedroom homes). Rotorua has a very small number of attached dwellings and these are predominantly 1-storey buildings, with only one-fifth of attached dwellings in building of 2 or 3 storeys.

c. Housing demand projections

As previously outlined, 6,000 new homes will need to be provided by 2030 and a significant proportion of these homes will need to be public.

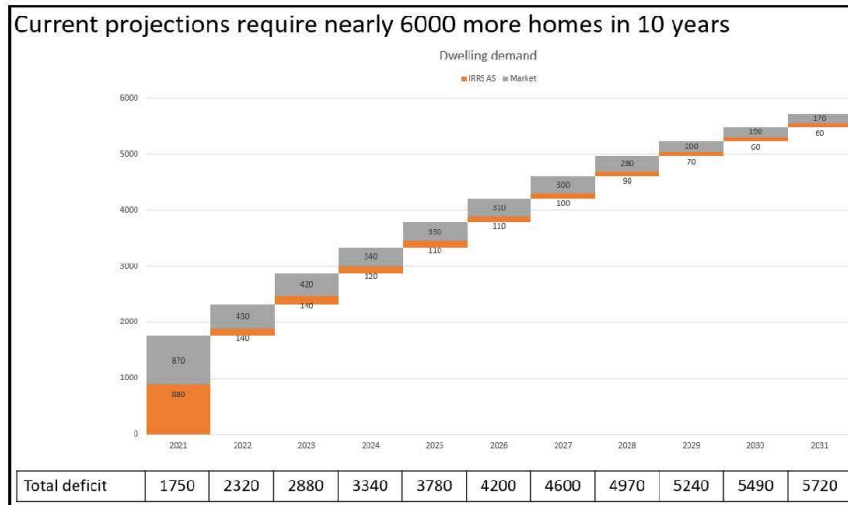


Figure 3 - 'Base case' projected additional dwelling requirement. Source: HUD place-based assessment and infometrics projections.

Due to a lack of sufficient zoned urban land to develop, there are limited greenfield development opportunities within the Rotorua District at the present time, with the exception of the Wharenui and Pukehangi developments which are appropriately zoned and are now being progressed. Hazards and stormwater management create additional limits on future greenfield zoning opportunities.

Infill and redevelopment opportunities are not being fully realised due to a number of issues such as high development and redevelopment costs, lack of supporting infrastructure and a restrictive rules in the district plan.

A further issue to note is that the population of Rotorua is ageing and families are getting smaller which necessitates a shift in typology from the 3-4 bedroom houses currently being built to more 1-2 bedroom homes. The number of households is expected to continue to increase over time, whilst the number of people per household is expected to continue to fall and as a result, 66% of household growth over the next 10 years will be in smaller household types, as shown by the graph below.

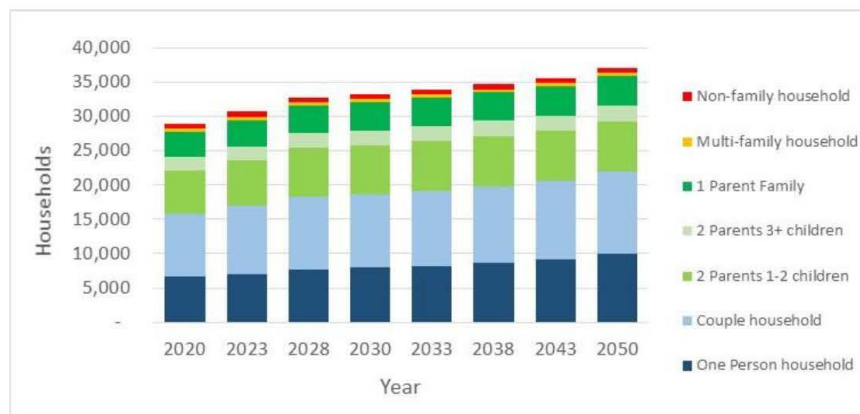


Figure 5 - Projected Household Growth Rotorua District in relation to Household Type

Historically there has only been a limited demand for higher density 'walk-ups' or 'mixed-use'¹ apartment style development in Rotorua. A small number of examples exist in the Central Business District (CBD) and CBD fringe where this type of housing is enabled. This is due in part to the currently high costs of redevelopment and hence the relative costs of these small typologies types versus the larger typologies in the suburbs (e.g. 3-4 bedroom detached dwellings). As it becomes more financially feasible to construct smaller 1-2 bedroom typologies then household demand is likely to follow and be progressively redirected from the suburbs if it is affordable. Ability to provide sufficient infrastructure without requiring large contributions from developers will be a key contributing factor in the affordability equation.

d. Infrastructure Background

As of June 2021, RLC is responsible for managing \$1.45 billion of core infrastructure assets including water supply, the treatment and disposal of sewage (wastewater), stormwater drainage (stormwater), and roads, cycleways and footpaths (land transport). RLC, like many councils, is facing issues maintaining their current service levels, renewing aging assets, and preparing for growth, while managing the impact on rates and debt levels. The RLC Infrastructure Strategy 2021-2051 identifies the significant infrastructure issues for Rotorua, the principle options for managing those issues and the implications of those options.

Water supply (not part of our IAF application)

The water supply network is in a generally good condition and the current capacity of the water supply system for Rotorua City is sufficient to service the existing urban area. Funding is included in the 2021-2031 LTP to expand the network to provide for anticipated growth until 2051.

Transportation (not part of our IAF application)

Investment in Rotorua's transportation infrastructure has been undertaken in recent years by both RLC and Waka Kotahi (NZTA), with a particular focus on providing multiple transport modes and major upgrades to State Highways 5 and 30. Significant funding is included in RLC's 2021-2031 LTP for future investment in the local transportation network that includes an increasing focus on mode shift.

Wastewater (not part of our IAF application)

The wastewater network in Rotorua faces a number of issues. Currently treated effluent from the Rotorua Wastewater Treatment Plant (WWTP) is irrigated into the Whakarewarewa Forest, it then passes through the land before the ground water is discharged into Lake Rotorua. This is no longer a viable option for a number of reasons, including cultural concerns and compliance with regulatory requirements and environmental standards such as the reduction in the consented nitrogen discharge allocation from the WWTP. RLC has committed to identifying and implementing a more culturally acceptable and environmentally sustainable solution by 2026. Part of the solution includes a significant upgrade of the WWTP and an increase in the capacity and service anticipated to meet residential growth. Funding of \$60 million has been included in the first five years of RLC's 2021-2031 LTP.

Stormwater (focus of application)

RLC's existing stormwater network is the most significant constraint to enable medium to long term urban growth within Rotorua. Stormwater planning was influenced by a long period of low growth

¹ Refers residential with commercial uses (typically residential apartments and accommodation above retail or office)

however planning for the required capacity to meet demand has become a challenge due to the sudden increased growth that is projected to be sustained at high rate into the future.

Rotorua is located within a caldera with Lake Rotorua at its centre. The existing stormwater assets at the bottom of catchments, where the majority of the existing urban area is located, are unable to adequately cope with the effects of intensification and greenfield development. Flooding has been exacerbated where development has occurred in an ad hoc manner and infrastructure has not been sufficiently upgraded. The frequency and intensity of storm events is increasing due to climate change and therefore so is the flooding risk for existing residential development. In response, the Bay of Plenty Regional Council introduced a requirement to reduce stormwater runoff from new developments to 80% pre-development, hence adding the need for onsite detention, which has further impacted development economics in the catchment.

In response to the sudden, and unforeseen population growth, significant urban developments have been proposed in the Western suburbs (Pukehangi Heights) and Eastern suburbs (Wharenui Road development) and supported by plan changes. Alongside this, in 2019, Council commenced a comprehensive stormwater master planning process to ensure that these developments and further future urban growth could be facilitated.

The Rotorua Stormwater Master Plan was completed in early 2021 and identifies the necessary flood management solutions required for the Eastern and Western parts of the city. The identified stormwater solutions have been modelled to:

- Mitigate stormwater effects from future urban growth areas (approximately 160 hectares within the Western suburbs and 700 hectares within the Eastern suburbs).
- Provide for maximum urban intensification (based on existing zoning requirements).
- Accommodate for increased scale and severity of rain events caused by climate change.
- Resolve existing flooding issues.

The scope of the Master Plan is limited to flood mitigation only and still anticipates a level of on-site stormwater management for specific developments. Although modelled as part of the process, upgrades to the central stormwater system were not included in the 30-year Infrastructure Strategy or the Stormwater Master Plan, as intensification growth in the central area was not planned for at the time.

e. The Solution

The combination of issues outlined above has resulted in a significantly growing demand for smaller, quality dwellings connected to good levels of amenity and accessibility. This affirms that we need to enable a more compact urban form by enabling the intensification of existing residential areas alongside greenfield expansion which aligns with the NPS-UD (2020). The NPS-UD aims to ensure that New Zealand's towns and cities have well-functioning urban environments that meet the changing needs of our diverse communities, a key consideration for RLC at this time.

The focus for intensification is to enable higher density around city centres, commercial centres, high amenity areas and key corridors. It is important to provide more opportunities for housing choice and diversity close to centres, while ensuring that the character and scale of new buildings is appropriate to the surrounding area.

To give effect to the above growth model RLC will enable intensification through a plan change that will provide for higher density development in locations with good access to amenities. We are currently conducting the analysis to support this change. Please refer to Appendix G 'Medium to High Residential Intensification and Development Opportunity Map' in our supporting material for a visual view of the medium to high residential intensification opportunities. The map shows Rotorua District's

centres and their walkable catchments (shown by the dotted lines); and corridors and amenity accessibility (the dark green areas show locations with high amenity access). This approach is broadly aligned with Kainga Ora's proposed development strategy for Rotorua

Through the implementation of the intensification plan change it is anticipated that the uptake of development opportunities within the existing urban area of Rotorua will increase significantly over time resulting in an aspiration for 50/50 split between urban infill and greenfield development by 2051.

However Rotorua's existing and (LTP) planned infrastructure will not be sufficient to support this growth.

f. Funding the solution

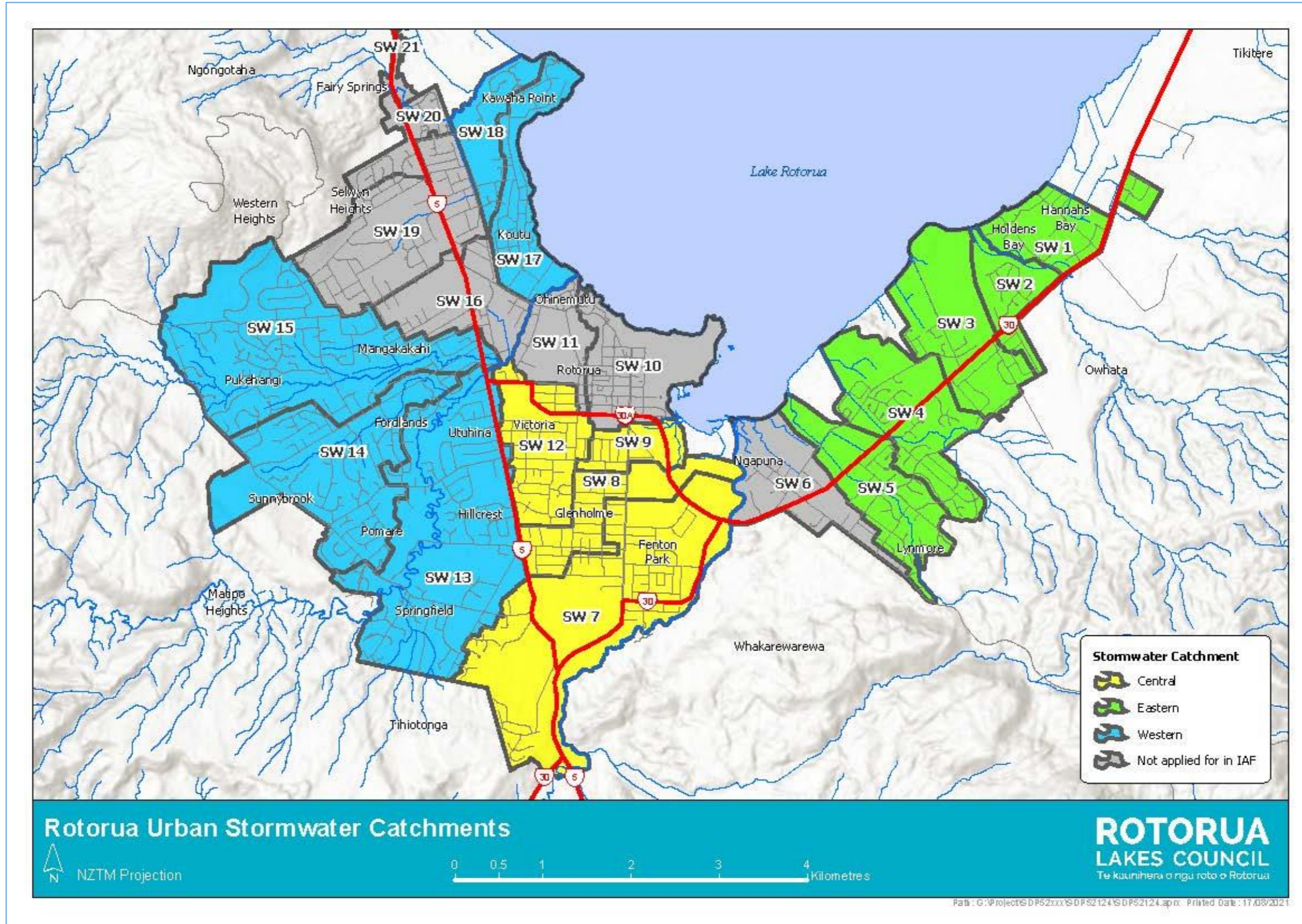
RLC's ability to fund priority amenity and infrastructure projects is limited to the current tools available, namely debt, rates, cost efficiencies and user fees and charges (including development contributions). RLC does not currently have a Development Contributions (DC) Policy. Following the completion of RLC's Housing and Business Development Capacity Assessment (HBA) by December 2021, RLC will be in the position to develop a DC Policy, which we have committed to implement for the 2022/23 financial year.

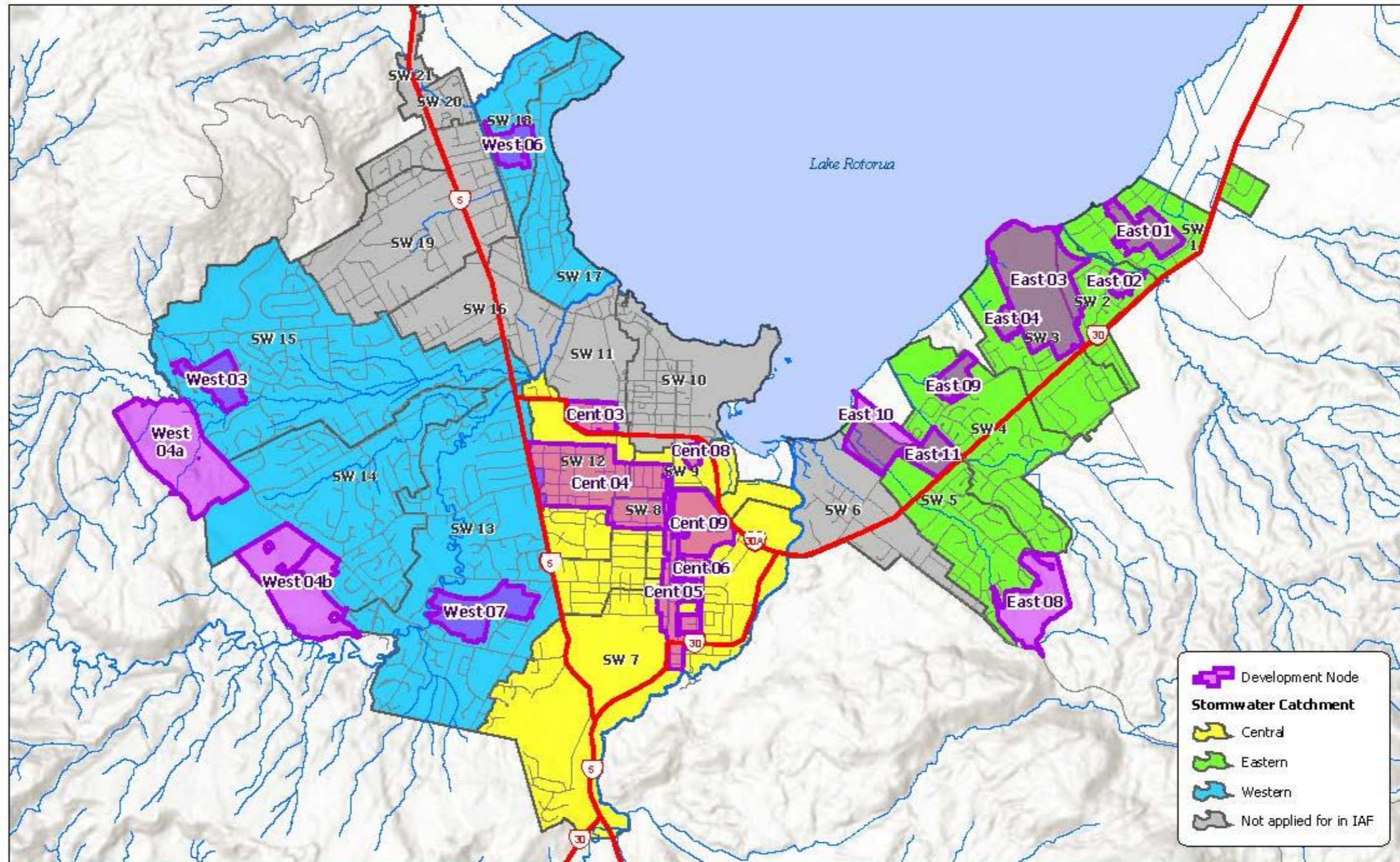
Within the current funding constraints of the LTP, and bearing in mind the high cost of land and construction in Rotorua, these development contributions will be the primary funding source for infrastructure growth. There is a real risk that without additional funding, it will be necessary for RLC to introduce a DC requirement that will severely restrict the economic viability of key infill developments.

Network infrastructure is not the only consideration. As the District grows, upgrades to existing community infrastructure will be required in existing urban areas, and new community infrastructure will be required in greenfield areas. Community facilities such as reserves and playgrounds, public toilets and community centres are mainly funded by Council through rates and financial contributions under the District Plan. Funding core network infrastructure through IAF will support RLC to adequately fund community infrastructure in the future. Access to community infrastructure such as playgrounds, community centres, libraries, and sport and recreation facilities, as well as schools and healthcare is a key contributor to the wellbeing of our community.

While our 2021 Infrastructure Strategy anticipates and makes provision for planned growth and climate change impacts, the Strategy is intended to be delivered over a 30 year period to 2051. RLC has committed budget to deliver the water supply, wastewater and transportation infrastructure requirements to meet anticipated growth within the 2021-2031 LTP. However, the necessary upgrades to the stormwater network required to accelerate housing outcomes are not adequately funded in the short or medium term, and did not include significant upgrades in the central area. Therefore, without the support of the IAF we will be unable to effectively address the growing housing crisis within the constraints of our debt level limits.

Attachment 2: Rotorua Urban Stormwater Catchments and Housing Outcomes



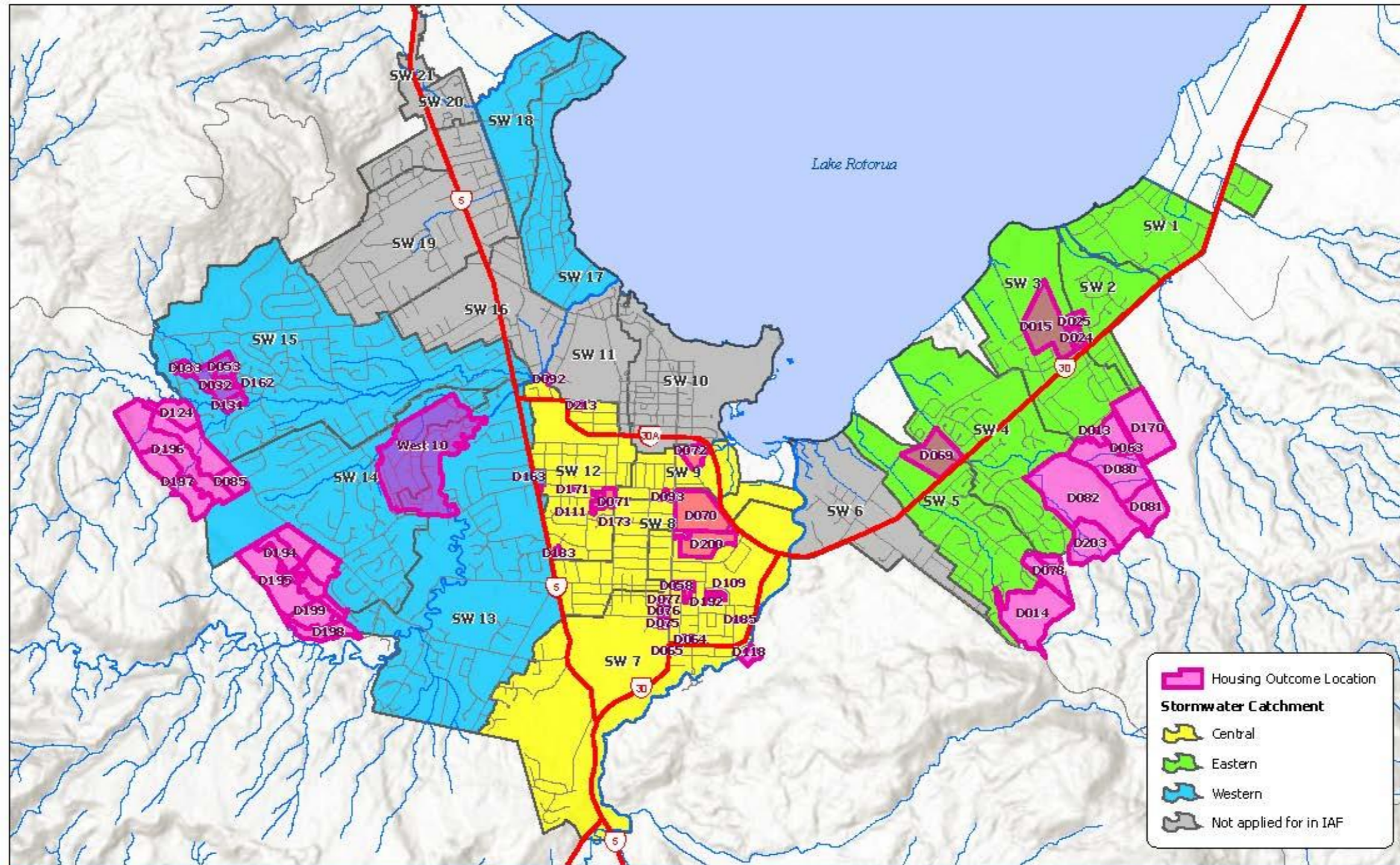


Development Nodes and Urban Stormwater Catchments

NZTM Projection



ROTORUA
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Te kaunihera o ngū roto o Rotorua



Housing Outcome Locations and Urban Stormwater Catchments

NZTM Projection



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Te kaunihera o ngū roto o Rotorua

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Attachment 3: Detail of Stormwater Plan

IAF APPLICATION – STORMWATER ENABLING WORKS

Catchment Area	Potential Development Areas	Potential HUE Yield	Proposed Upgrade Work to Enable Development	Estimated Cost
I. Western Area (Refer to Key Map)	Pukehangi Plan Change 2 <ul style="list-style-type: none"> ○ <u>West 04a</u> <ul style="list-style-type: none"> ○ Freedom Village (153 Pukehangi Road) ○ Sunnydowns subdivision ○ <u>West 04b</u> <ul style="list-style-type: none"> ○ 125 Pukehangi Rd (Sumner) ○ 363, 387 & unnumbered parcel, Pukehangi Rd (Hunt Estate) ○ 30 Matipo Rd (Te Arawa Group Holdings) ● <u>West 03</u> <ul style="list-style-type: none"> ○ 17 Diamond St. ○ 48 Collie Dr ○ 130 Homedale St. 		PC2 area lies within the hydrologic boundaries of stormwater sub-catchments 13, 14 & 15. These form part of the greater Utuhina catchment. The stormwater master plan (T&T, April 2021) assumes on-site detention at each greenfield development within the catchment. In addition to on-site detention, 4 detention dams will be required to mitigate flooding problems, address climate change and enable infill development within the urbanised areas of the catchments. The 4 dams are as follows: <ul style="list-style-type: none"> ● Wetland and water quality work (20% of detention pond) ● Wright Park dam (80,000m³) ● Mangakakahi dam (130,000 m³) ● Linton East dam (122,000 m³), \$7.5 M DIA fund ● Linton West dam (58,000 m³) 	\$8 M \$8.3 M \$14 M \$6.5 M \$4.4 M <hr/> SUB-TOTAL \$41.20 M
	<ul style="list-style-type: none"> ● <u>West 06</u> <ul style="list-style-type: none"> ○ Frank St. ○ Part of Waikite Rugby Club 		Development area in sub-catchment 18 of the stormwater system that ends discharging to Waiowhiro Stream. To enable development, the following are required: <ul style="list-style-type: none"> ● Upgrade existing 450Ø storm drain to 1200mmØ (L=130m); ● Upgrade existing 1200mmØ Bellvue road culvert crossing to 1500mmØ (L=10m); ● Provide 8,000m³ detention pond at the RLC reserve land, i.e. 89 Kawaha Point road including wetland and water quality work (\$0.3M). 	\$0.3 M \$0.06 M \$1.5 M <hr/> SUB-TOTAL \$1.90 M
	<ul style="list-style-type: none"> ● <u>West 07</u> <ul style="list-style-type: none"> ○ Springfield Golf Course 		The golf course is part of sub-catchment 13 that eventually discharge to the Utuhina Stream. Works required to allow development of this area: <ul style="list-style-type: none"> ● Wetland and water quality work ● 2- detention basins, 38,000 m³ capacity each; <ul style="list-style-type: none"> ● 1500mmØ basin outlet: <ul style="list-style-type: none"> ○ Length = 350m ○ Length = 140m 	\$1.6 M \$7.6 M \$1.05 M \$0.42 M <hr/> SUB-TOTAL \$10.70 M
	<ul style="list-style-type: none"> ● <u>West 08</u> <ul style="list-style-type: none"> ○ East of Bennetts Rd to Utuhina Stream 		Development area is already built up with a number of medium sized vacant lands. Area is within stormwater sub-catchment 17 discharging directly to Lake Rotorua. This is a low lying area and at the bottom of the stormwater catchment, highly influenced by lake level. To enable development, the following works are required: <ul style="list-style-type: none"> ● New 220m long, 750mm x 900mm box culvert along Panui St. between Bennetts road and Whitaker road; ● Upgrade existing drain along Whitaker road to 600mm x 2200mm box culvert down to Panui St (L=90m); ● Upgrade existing drain along Whitaker road between Panui St and lake to 800mm x 3000mm box culvert L=290m each side of road); ● New 90m long 600mm x 2200 box culvert along Whitaker road down to Panui St; ● New 10m long 800mm x 3000mm box culvert link between two box culverts; 	\$0.42 M \$0.24 M \$1.03 M \$0.24 M \$0.04 M <hr/>

			SUB-TOTAL	\$1.97 M
	•		Support for mana whenua engagement	\$0.2M
	•		SUB-TOTAL Western	\$55.77 \$5.577 \$61.55M
II Eastern Area (Refer to Key Map)	• <u>East 01</u>		The development areas are within the downstream slopes of sub-catchments 1 & 2. The upstream slopes, i.e. east of Te Ngae Road are greenfield areas and are not considered in this application. If development happens, on-site detention will be required. For the East 01 development areas, the following works will also be required:	
	○ Lee Rd		○ Upgrade of existing timber lined channel along Lee Rd. (950m)	\$1.5 M
	○ Middleton Rd		○ 225m of 375 Ø storm drain along Middleton St. including manholes and cesspits	\$0.17 M
	○ Maple Grove		○ 5,000 m ³ detention pond for Maple Grove development & connection to Waingaehe Stream (including wetland and water quality work).	\$0.8 M
	<i>Note: Upper part of catchment not considered</i>		SUB-TOTAL	\$2.47 M
• <u>East 03</u>		East 03 lies within sub-catchment 3. There are flooding issues within Galvin Road. The end section of the existing open channel in Galvin road traverses private properties. To provide solution to the problem and enable development, the following works are needed:		
○ Galvin Rd		• Piping of existing open channel along Galvin Rd replacing the open channel and direct discharge to Waingaehe Stream (430m of 750Ø pipe & 480m of 1050Ø pipe);	\$1.65 M	
○ Hinemoa Point		• New drain along Hinemoa Pt (380m of 450Ø pipe);	\$0.34 M	
○ Umurukia Rd		• New drain along Umurukia St. (300m of 450Ø pipe);	\$0.27 M	
○ Vaughan Rd extension		• Piping of existing open channel along Vaughan Rd extension, i.e. health and safety hazard (425m of 1050Ø pipe);	\$0.89 M	
○ Te Roro Te Rangi Rd		• New drain along Te Roro Te Rangi Rd. (600m of 500Ø pipe);	\$0.6 M	
		SUB-TOTAL	\$3.75 M	
• <u>East 04</u>		Development area is in sub-catchment 3. Stormwater can flow direct to lake. Works required are as follows:		
○ Owhata Rd		• Slope stabilisation/relining of open channel along Owhata Rd (700m);	\$1.05 M	
○ Mansfield Rd		• New drain (280m of 450Ø pipe);	\$0.25 M	
		SUB-TOTAL	\$1.30 M	
• <u>East 08</u>		Development areas to be mitigated in sub-catchment 5 is shown in Figure 7. The stormwater master plan identified provision of 2 detention dams to solve current flooding problems downstream of the catchment and enable greenfield and infill development within the catchment:		
○ End of Iles Rd, Butler Rd & Link Rd		• Wetland and water quality work	\$1.1 M	
		• Detention dam 1 (10,000m ³)	\$2.2 M	
		• Detention dam 2 (22,000 m ³)	\$3.10 M	
		SUB-TOTAL	\$6.40 M	
• <u>East 9, 10 & 11</u>		Growth areas are within the boundaries of sub-catchment 4. Flooding issues exist in the downstream built up area of this catchment which could worsen with further intensification and development of upstream greenfield areas.		
○ Wharenui block (NWTL);				
○ Vaughan Rd, Ngapuna				
○ Owhatiura South 5				

			<p>The stormwater master plan identified a catchment wide solution (Option 4A) to address existing flooding problems and enable greenfield & infill development in the area. The solution includes 2 detention dams and conveyance upgrade downstream of the proposed detention dams as follows:</p> <ul style="list-style-type: none"> • Detention dam 1 (Wharanui East): CIP funded; • Detention dam 2 (Wharanu West): CIP funded; • Melrose Place open channel upgrade; • Morey St. culvert upgrade; • Te Ngae Rd. culvert upgrade; • Owhatiura South 5 open channel upgrade; • New drain from Vaughan Rd to lake 	<p>\$0.00 M \$0.00 M \$2.80 M \$0.40 M \$1.30 M \$1.50 M \$1.50 M</p>
			SUB-TOTAL	\$7.50 M
	•		Support for mana whenua engagement	\$0.20 M
	•		SUB-TOTAL EASTERN	\$21.62 M \$2.142 M \$23.760M
III. Central Area (Refer to Key Map)	<ul style="list-style-type: none"> • <u>Cent 03 & 04</u> <ul style="list-style-type: none"> ○ <u>Whakatau Street (Cent 03)</u> ○ <u>Glenholme area (West side of Cent 04)</u> 		<p>This built up area includes the Whakatau St. area and part of Central 04 that belong to sub-catchment 12. Flooding is the main issue in this catchment because the area is low lying and the existing stormwater system is insufficient and also lacks stormwater overland flow path. To enable intensification of development, the following works are required:</p> <ul style="list-style-type: none"> • Upgrade existing drains along Hinemoa St. between Ranolf St. and Amohau St. as follows: <ul style="list-style-type: none"> ○ 225m of 600mmØ pipe; ○ 90m long of 750mmØ pipe; ○ 190m long of 900mmØ pipe; ○ 40m long of 1200mmØ pipe; ○ 65m long of 1800mmØ pipe. • Upgrade existing drains along York St and James St between York St and Malfroy Rd. with 375mmØ pipe (L=200m); • Upgrade existing drain along Malfroy Rd. from James St. to Phillip St with 525mmØ pipe (L=145m); • New 120m long 375mm Ø drain pipe along James St. from Malfroy Rd to Larch Rd. (L=120m); • Upgrade existing drain along James St. from Larch Rd to Elizabeth St. to 750mmØ (L=180m); • New 375mm pipe along Larch Rd. (L=150m); • Upgrades along Elizabeth St from Ann St. to King St.: <ul style="list-style-type: none"> ○ New 155m long 375mmØ pipe; ○ 900mmØ replacement pipe (L=350m); ○ New stormwater pump station; ○ 900mmØ rising main discharging to stormwater pipe along Malfroy Rd. (L=520m); • Upgrade existing drain along Phillip St, from Malfroy Rd to Elizabeth St to 2000mmØ pipe (L=300m); • Upgrade existing drain from Elizabeth St to Pererika St to 2200 x 2200 box culvert (200m). 	<p>\$0.27 M \$0.14 M \$0.34 M \$0.10 M \$0.23 M \$0.15 M \$0.15 M \$0.09 M \$0.27 M \$0.22 M \$0.12 M \$0.63 M \$0.75 M \$0.94 M \$0.8 M \$1 M</p>

		SUB-TOTAL	\$6.20 M
<ul style="list-style-type: none"> • <u>Cent 04</u> <ul style="list-style-type: none"> ○ East of Lytton St Fenton CM4 area within sub-catchments 8 & 9. ○ Victoria St. and surrounds 		<p>Part of Central 04 that forms part of stormwater sub-catchments 8, & 9. Flooding is an issue in this area during big rain events as most of the area are low lying and the existing stormwater drains are undersized. The area also have insufficient overland flow paths. To solve flooding problems and enable intensification, the works listed below will be necessary.</p> <ul style="list-style-type: none"> • Upgrade stormwater pipe network as follows: <ul style="list-style-type: none"> ○ New 450mmØ pipe along Malfroy road from House #52A to Lytton St. (L=235m); ○ Replace existing drain along Malfroy road between Lytton St. and Fenton St. with a 900mmØ pipe (L=240m); ○ New 450mmØ pipe along Lytton St. from Seddon St. to Malfroy Rd. (L=110m); ○ New 135m long 1800mmØ drain pipe along Fenton St. from Seddon to Malfroy Rd; ○ Replace existing drain along Seddon St. with 1800mmØ pipe from Lytton St to Fenton St. (L=230m); ○ Replace existing drain along Lytton St with 1800mmØ pipe from Robertson St. to Seddon St. (L=365m); ○ Replace existing drain along Ti St. with 1800mmØ pipe from Fenton St. to Te Ngae Rd. (L=310m); ○ Replace existing drain across Te Ngae Rd, Rugby field and Amohau Rd with 2200mmØ pipe (L=250m); ○ Replace existing drain along Victoria St. with 750mmØ pipe (L=290m); ○ Replace existing drain along Fenton St. from Victoria St. to Te Ngae Rd with 825mmØ pipe (L=105m); ○ Replace existing drain across Fenton St. from Victoria St. to Te Ngae Rd and across Te Ngae Rd. from Fenton St to the open channel section at the back of Council recycling centre with 1050mmØ pipe (L=265m). 	<p>\$0.21 M</p> <p>\$0.43 M</p> <p>\$0.10 M</p> <p>\$0.49 M</p> <p>\$0.83 M</p> <p>\$1.31 M</p> <p>\$1.11 M</p> <p>\$1.1 M</p> <p>\$0.44 M</p> <p>\$0.17 M</p> <p>\$0.56 M</p>
		SUB-TOTAL	\$6.75 M
<ul style="list-style-type: none"> • <u>Cent 05 & 06</u> <ul style="list-style-type: none"> ○ Fenton St. RS2 ○ Fenton St CM4 		<p>Central 05 and 06 form part of stormwater sub-catchment 7. This area in the Fenton St. surrounds could intensify with further developments. Flooding is an issue during big rain events in White St., Marguerita St, Te Ngae Road, Cloutston St. and other adjacent streets as most of the area are low lying and lacking overland flow paths. The existing drains are significantly undersized.</p> <p>To solve flooding problems and enable intensification, the below works will be required.</p> <ul style="list-style-type: none"> • Upgrade existing stormwater pipe network, i.e. sub-catchments 7 as follows; <ul style="list-style-type: none"> ○ Replace existing drains along Fenton St. with 600mmØ pipe (L=90m); ○ Replace existing drains along Maida Vale & Hilda Sts. with 600 Ø pipe (L=360m); ○ Replace existing drains along Clouston St. with 900mmØ pipe (L=340m); ○ Replace existing drains at the council reserve land (crematorium) at the back of White St with 1500mmØ pipe (L=470m); ○ Replace existing drain across Fenton St (towards Ward St) with 750mmØ pipe (L=50m); ○ Replace existing drains along Fenton St (Gwendoline St to Ward St) with 1500mmØ pipe (L=240m); 	<p>\$0.11 M</p> <p>\$0.43 M</p> <p>\$0.61 M</p> <p>\$1.41 M</p> <p>\$0.08 M</p> <p>\$0.72 M</p>

		<ul style="list-style-type: none"> ○ Replace existing pipes along Ward St (Fenton St to Puarenga stream) with 540m long 2000mmØ pipe & 315m long 2500mmØ pipe; ○ Replace existing drain along Deere Ave with 600mm pipe (L=220m); ○ Replace existing drain along Mckee Ave with 200m long of 450mmØ pipe and 280m long of 600mmØ pipe; ○ Replace existing pipe along McIntyre Ave with 750mmØ pipe (L=300m); ○ Replace existing pipe along Froude St. with 600mmØ pipe (L=250m); ○ Upgrade of Tilsley street pump station. ● New drains: <ul style="list-style-type: none"> ○ 255m of 450mmØ pipe along Meade & Fenton Sts. To Froude St; ○ 440m of 600mmØ pipe along Peace St. & Hilda St (between Fenton St and Marguerita St); ○ Extension of existing 600mmØ HDPE Tilsley St. pump station rising main along Marguerita St. to the open channel along Te Ngae Road (discharging direct to Puarenga Stream), L=525m; 	<p>\$3.73 M</p> <p>\$0.26 M</p> <p>\$0.52 M</p> <p>\$0.45 M</p> <p>\$0.30 M</p> <p>\$0.75 M</p> <p>\$0.23 M</p> <p>\$0.53 M</p> <p>\$0.63 M</p> <hr/> <p>SUB-TOTAL \$10.76 M</p>
	<ul style="list-style-type: none"> ● <u>Cent 08</u> <ul style="list-style-type: none"> ○ Recycling Centre 	<p>Forms part of sub-catchment 9 and will form part of the solution for the flooding in sub-catchments 13 and 8. Work associated with this development will include:</p> <ul style="list-style-type: none"> ● Clearing/forming and slope stabilisation of existing open channel at the back of the recycling centre (L=180m); ● Upgrade of stormwater screen/sediment trap structure; 	<p>\$0.54 M</p> <p>\$0.25 M</p> <hr/> <p>SUB-TOTAL \$0.79 M</p>
	<ul style="list-style-type: none"> ● <u>Cent 09</u> <ul style="list-style-type: none"> ○ Rotorua Race course 	<p>Development area is within sub-catchment 8 of the stormwater network. To enable development, work required will be as follows:</p> <ul style="list-style-type: none"> ● New 1200mmØ culvert across Te Ngae road (L=50 m); ● Upgrade existing 2-900mmØ culverts across Amohau extension to 2-1200mmØ culverts (L=72m); ● Upgrade existing open drain between Te Ngae road and Amohau Extension (L=16m). 	<p>\$0.30 M</p> <p>\$0.50 M</p> <p>\$0.10 M</p> <hr/> <p>SUB-TOTAL \$0.90 M</p>
		<p>Support for mana whenua engagement</p> <p>Support for Utuhina Stream solution (Options, feasibility and engagement)</p>	<p>\$0.20 M</p> <p>\$0.40 M</p>
			<p>Sub-total Central \$26,000,000</p> <p>\$2,540,000</p> <p>\$28,540,000</p>
			<p>Total Amount Applied for Funding \$113.85 M</p>
			<p>\$114 M</p>
			<p>Eastern CIP funded (2022/2023) \$12M</p>
			<p>\$126M</p>